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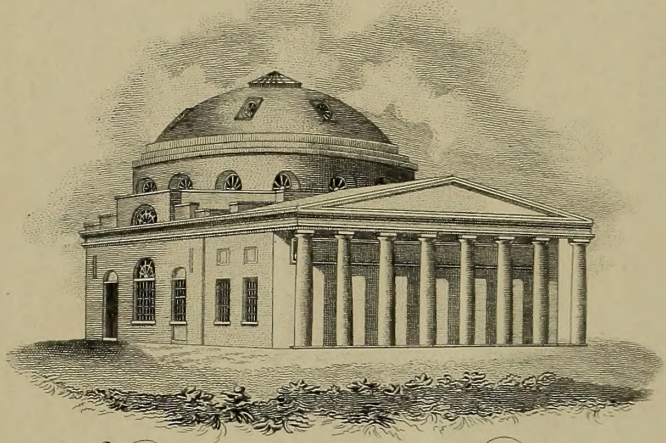

University of Maryland

University of Maryland Theses

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UNIVERSITY OF MARYLAND

THESES

1870 (b)

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Keerl, Charles F.	Dyspepsia
Howard, Alexander W.	Typhoid Fever
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McShane, James F.	Concussion of the Brain
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Anderson, Samuel H.	Report of Six Cases

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1870 (b)

Eichelberger, James W.	The Circulation	30p.
Barton, Bolling W.	Hereditary Traits and Tendencies	19p.
Keerl, Charles F.	Dyspepsia	24p.
Howard, Alexander W.	Typhoid Fever	24p.
Talbott, T. Melville	Diphtheria	22p.
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Ziegler, Henry A.	Atropa Belladona	27p.
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McShane, James F.	Concussion of the Brain	22p.
Waller, Wm. William J. C.	Hysteria	17p.
Anderson Hall, Samuel A.	Report of Six Cases	40p.

An
Inaugural Dissertation
On
The Circulation,
Submitted to the examination
Of the Provost, Regent, and
Faculty of Physics
Of the
University of Maryland.
For the Degree
Of
Doctor of Medicine,
By
Jas. W. Eichelberger.

25

1870

IMb
18960

Circulation.

[illegible] nutritive portion [illegible]

[illegible] has been brought [illegible]

[illegible]

[illegible] elaborating, [illegible]

[illegible]

The lungs and [illegible] glands are constantly occupied in separating the effete matter from the blood, which would be detrimental if permitted to remain in the blood and be again distributed throughout the system.

[illegible]

which communicate with one another, from these, vessels arise, which convey the blood to all parts of the body, and the vessels which bring it back from all those parts likewise terminate in these cavities.

The Heart is placed in the chest, between the lungs, surrounded by the peri-cardium, a dense and fibrous membrane furnishing an external covering to the heart, and bedewing its surface with a serous fluid, which facilitates its motion and prevents its adhering to the neighbouring parts.

Its location is nearly towards the union of the upper third of the body, with the two lower thirds, its ventricle to the upper parts, [illegible]

[illegible]

[illegible] ties which

[illegible] a measure

[illegible]

nall muscular-membranous bags op-
posed to each other, receiving the blood
[illegible] veins, and pouring that
fluid into the ventricles, at [illegible]
of which the auricles are, as it were, ap-
plied. The ventricles are two muscular
bags separated by a partition of the same
nature, and belonging equally [illegible];
they form the greatest part [illegible]
heart and give origine to the arteries.
The auricle and ventricle on the right
side, are larger than those on the left

AN

Inaugural Dissertation

ON

Hereditary Traits and Tendencies

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Rollins W. Barton

Of

Virginia

Session of 1869 & 70 - 1870.

Thesis of

B. W. Barton

On

Hereditary Traits & Tendencies

University of Maryland

Session 1869 & 70

Hereditary Traits and Tendencies

"The ailments of our parents" says Baillon, "are inherited as well as their goods, and this sad inheritance is far more certainly transmitted than the former".

The biological phenomenon by which ancestors transmit to their descendants peculiarities of organization and of aptitude defines the subject about to be considered. Entering into that order of physiological acts called results, like all the acts of this order it

is found especially attending one of the elementary functions of the organism. As the production of animal heat or calorification is one of the results of the function of digestion
reproduction, so is the phenomenon in question peculiar to that special function of reproduction to which all others may almost be said to be subservient.

This legacy or Transmission of peculiarities may be direct; that is the offspring may bear the type of the father or mother; indirect as when the resemblance may be

traced to some collateral relative; returning or retrograde when the child steps one or more generations to find its likeness in the person of a grandparent; and finally by influence the most unaccountable and strange of the several forms, in which we can trace certain traits and peculiarities only to an agent which once influenced but whose influences, even those over the one or the other parent, had been entirely withdrawn. A widow, for instance, marries and bears children resembling the former husband, or the well known instances of the mare

folded first by a zebra then successively by three stallions, the three colts of these bearing the stripes of the zebra, seem to illustrate this law.

Directly opposed to the present is another phenomenon in virtue of which the offspring differs entirely from any ancestor and influenced by some unknown or unnoticed agent becomes into the family a new and original member. This is the french "innéité" to express which we have no one word.

An attempt having been made to define our subject, we will

next consider the effects of hereditary influences in some of the various forms by which they are manifested to us. And first we will refer to that form which attracts the attention of the commonest and most careless observer, namely the exterior conformation of our body. A single feature or organ, the head the trunk, the limbs, the hair or even the nails may all or any reveal the author but no part of the body bears his image more distinctly and more habitually than does the face. We constantly say and hear said that such a one is of such and such

a family because he retains the well marked features, the eyes, the mouth or the general expression of an ancestor whose appearance is still in the memory of the speaker. The face rarely fails to betray him and this though peculiar to an entire race is nevertheless hereditary with them as will be seen hereafter.

It sometimes happens that this hereditary repetition of features does not appear in the early life of the individual but only at an age when the transmittor presented the same traits. It may also occur that there

features or peculiarities are but tempo-
rary, passing from one set to another
and following closely the changes which
age, climate or other agents may
have wrought in the person of the
parent even though the child may
not have been subjected to the same
influences, showing that acquired as well
as innate peculiarities are obedient to the
same laws of hereditary transmission.
It was upon the observation of this
fact that Backwell, Fowler and other
English breeders based their plan of
creating domestic races gifted with spe-
cial desired qualities. By a series of

crossing, a system called breeding in and in, they were enabled to concentrate in one individual animal the best qualities[1] shared by a number and to build up superior races which will subsist as long as the invasion of any strange blood is excluded but which are ready to melt away into the common type as soon as man's care to avoid this invasion is withdrawn. The fleet-English racer, the gigantic cart-horse and the long winded fox driver furnish abundant proof of the success of this system.

The internal structure of the body

1 Qualities often developed and perfected by training.

presents evidences of the power of the laws of transmission too well marked to be annulled. Nothing is more positive than the inheritance of form, volumn or anomaly of the osseous system. Every bone, important and most insignificant, is subject to their influence. The well or ill-developed head, the arched or flat-foot and peculiarities of all the intervening skeleton are often handed from generation to generation without perceptible change. The brain too, the great central ganglion of the nervous system upon which so much is dependant, is sometimes found

stamped with peculiarities of antecedents. Its general dimensions and even the form and volume of certain convolutions was observed by Gall and suggested to him the idea of thereby interpreting the propagation of the mental faculties —

The transmission of idiosyncrasies is as common as that of the several peculiarities just alluded to. Certain persons may expose themselves to the most contagious and virulent of poisons without fear of their effects. The wife and family of Fodéré furnish us with an example of this sort. The wife's father lived to the good old age of

ninety one years having devoted the greater part of his life to the practice of his profession, that of Medicine. During his long career he was frequently exposed to Variola without ever having contrated the disease. His children were likewise exempt and the children of Fodère ~~[illegible]~~ resisted even the careful and repeated inoculation of the same virus —

Along with idiosyncrasies may be considered physical anomalies — One of these having fallen under observation within the past few days may be worth noting in this connection. It consisted in the existence of a fleshy bridge. extending

from side to side of the fortunes about an inch in rear of the arms and which had been handed down successively through four generations. Arrest of development as in albinism, have lined or hypergenesis as of multiplicity of the mammae and testicles, supernumerary fingers and toes so common, may all have been derived from parent, grandparent or beyond in the scale of ancestors similarly affected.

Duration of life is undoubtedly a gift from parents to their offspring. Who of us has not made the remark on hearing of the sudden ~~and untimely~~ end of an acquaintance, that he was of a short-lived family

and therefore there is no occasion for surprize. There are unfortunately many of these families with whom a precocious death is so ordinary that even the most healthy of their members with extraordinary precautions are unable to ward it off.

Mr. Lucas in writing upon this subject adopts a sort of classification into "average life" and "individual longevity". The first of these he makes dependant upon climate, hygiene civilization etc, of the last entirely independant of these conditions instances are found among all colours and races and under any conditions.

There seems to be a vitality so peculiarly

and so profoundly imprinted in the nature of some that it is manifested in every function of their organisms, the sensorial, motor, mental, sexual, all seem carried on with such energy and regularity as to bestow upon the fortunate individuals a sort of immunity against all diseases, and death only reaches them when there is a literal and a natural wearing out of the strong machinery which their bodies contained.

In connection with the procreation of our moral nature, St. Luca tells us that no one of our senses possessed of a peculiarity could have

obtained such preeminence except in obedience to the laws of inheritance. He furthermore proves from his ethnological observations that the traits composing, in different peoples, their nationality are propagated with the race —

We have thus far dealt only with facts deduced directly from observation, we have spoken of effects without considering causes. If these were wrapped in that mysteriously impenetrable cloak of "vital force", we had better have stopped here leaving their solution to future generations. But accepting as truths

certain results from by chemical experiments and aided by that powerful agent; the microscope, we may safely go a step further and attempt an explanation.

Now we know from these experiments that certain organic substances are possessed of the faculty of transmitting by simple contact with other substances of a different species, the peculiar molecular state in which they are found. This second sort of substances. Such is the case with yeast; "a little leaven, leaveneth the whole lump", a single decomposed apple placed in a barrel of sound ones soon decomposes the whole

number. Is it not even more probable then that all parts dependant for their very life and development upon an original generating cell will be modified for better or for worse according to the state of this cell, and so may we not explain how the spermatozoa may transmit to the embryonic female cells, whose birth it determines with the aid of the vitellus, its own molecular state? This then will be an hereditary transmission modified both by the spermatozoa and by the entire female organism. How else may we more clearly understand how pathological affections which have

altered the organism even to its ultimate elements may be transmitted and as Burton remarks, this seed inheritance is by far the most constant.

It is certain that habits, climate, occupation etc do in time produce considerable changes in our organism, so much so that the millions of years since the creation of the earth and the countless variety, the myriad of circumstances to which a few original beings may have been subjected, may explain the origin of the thousands of species which inhabit the earth. This would be transmission of acquired peculiarities.

Medicine is too extensive a branch

of the sciences or rather embraces too many of them for the student of one or two years to present much that is original. The subject of the present thesis has consequently been chosen, (though a little foreign to Medicine proper is nevertheless a physiological phenomenon and obeys the callings of the regulations) as having the advantage of being a subject concerning which facts may have been gleaned by observation during years of ordinary life and occupation. Much of course has been omitted. A few observations adapted to what seem accepted theories has composed the thesis —

AN

Inaugural Dissertation

ON

Dyspepsia.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Charles F. Keerl

Of

Maryland

Session of 18 7 - 70. 18

Dyspepsia.

From Δυς difficulty; πεπτω to digest.

This is one of the most common diseases that we are called upon to treat. Under the term Dyspepsia we are accustomed to [illegible] of troublesome symptoms, often occurring in connection with each other, that it seems reasonable to refer [illegible] them as resulting from the same morbid state of the organ primarily affected.

Symptoms. Dyspepsia does not [illegible] come under the notice of the physician, until the patient has suffered from it for a considerable [illegible].

One of the first [illegible]

[illegible]

sense of weight, tension and fullness in the neighborhood of the abdomen. Anorexia and defect or irregularity of apetite generally exist; this is often enhanced into nausea, more or less intense, and may last for weeks without ceasing, it may be accompanied with vomiting of food or drink taken at meals.

There is also great depression, languor both mental and physical, with persistent constipation, constipation and irregularity of the bowels.

The tongue is foul, with [illegible] and a disgusting taste in the mouth.

[illegible]

[illegible]

Cardalgia or heart burn is a [illegible] symptom of Dyspepsia, which is [illegible] some to be dependent on [illegible] of [illegible], [illegible] true as the fluids [illegible].

Pyrosis or water brash is also an attendant consists in an abundant secretion and ejection from the stomach, of a thin sour mucous, sometimes tasteless. With this may [illegible] be caused [illegible] of [illegible].

Headaches of [illegible], [illegible].

dull and imperfect vision, and similar
delusions, are generally some of the symptoms
of the more severe forms of this disease.
The respiration is sometimes very much
embarrassed, depending on the food
that has been taken, lying heavily, and
the formation of gas, both of which
combined, act on the diaphragm by pressing
upwards.
The circulating system is not apt to be
affected, though it may be overcome
of the impoverished and fluid state
of the blood, thus producing palpitation.
Pure is generally natural, but may
be slow, or at other times soft and weak.
The mind is variously affected, it may

scanty and light coloured, and at other times copious and colourless. The patient is very much troubled during sleep by dreams, which on account of the direct connection between the stomach and the brain by the 8th pair of nerves, is greatly increased with the impaired state of the [illegible].

There is often a tendency to low spirits, the patient is [illegible] to imagine himself [illegible] with some incurable disease.

Pathology. [illegible] has been [illegible] in regard to the symptoms, it would appear that the pathology could be easily made out, but such an important organ as the stomach, and there being so many

causes which prevent it from performing its function physiologically, it is more difficult than at first supposed. The most prominent, if not the most attractive cause is [illegible] innervation, which may be either superfluous, causing too great a secretion of fluid, or may be deficient and causing insufficient secretion of the gastric juice. Morbid condition of the vessels of the gastric surface. There may be either redundancy or deficiency of blood in the tissues of the stomach, anaemia as well as hyperaemia. The [illegible] [illegible] [illegible] of the stomach may be impaired, so that the peristaltic movements are not properly performed, and the necessary mixture

[illegible]

[illegible].

Again the absorbing powers of the stomach may be diminished and thus the assimilation of fluids made more difficult.

Causes. The causes of Dyspepsia are divided by a prominent writer in to direct and indirect. The direct causes are those which affect the [illegible] by [illegible] [illegible] upon it. The [illegible] are those which affect it by [illegible] through the general system. The first of the [illegible] [illegible] of Dyspepsia is [illegible] [illegible]. The [illegible] [illegible] [illegible] [illegible] with the [illegible]. The [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] of [illegible] the [illegible]

is prevented, the [illegible] [illegible] [illegible]
masticated pasts into the stomach, where it
surface is gradually melted down by the
action of the gastric juice with difficulty.
[illegible] it is clear that no definite proportion
to the tenacity and solidity of the meal
taken will be the slowness of its solution.
Too great a quantity of food taken
at a meal, is one of the prominent causes
of the disease. Rapid eating from the
excessive occupation, and the hurry of
pressing business, together with the decayed
state of the teeth, all gotogether to deter
[illegible] Dyspepsia.
The cooking of the food intended to
be [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible] the [illegible]

by the action of the boiling fluid, is a general thing more acceptable to the appetite, and more easily assimilated by the stomach, than those that are but partly [illegible].

Hot drinks are supposed by some, to be [illegible] the function of the organ, but this has not been clearly defined. Various medical substances such as Tobacco, Opium and Alcohol, [illegible] the [illegible] of Dyspepsia, by depressing the sensitive nervous system of the stomach.

Of the indirect causes, they are almost,

[illegible]. [illegible] [illegible], [illegible] [illegible]
for an example, [illegible] [illegible] [illegible]
to [illegible] [illegible], [illegible] [illegible] [illegible]
and [illegible] the light of the sun, which is
itself [illegible] [illegible] [illegible] [illegible]
vegetable life, the [illegible] in [illegible]
and an [illegible] [illegible] [illegible] [illegible], [illegible]
ledge, neglects bodily [illegible], [illegible] [illegible]
of meals and loss of [illegible] [illegible] night.
Here are a few of the [illegible] causes of
Dyspepsia.

Passions and emotions are among the
most [illegible] [illegible]. [illegible] [illegible]
will cause it by [illegible] [illegible] the [illegible]
[illegible] of [illegible] [illegible], [illegible] [illegible],
and protracted [illegible], [illegible] of [illegible], [illegible]

[illegible]

mentioned. Excessive venereal [illegible]

may sometimes be reckoned as one of the

causes.

Diagnosis. There is only one disease that

Dyspepsia is likely to be confounded

with; Chronic Gastritis; there is a marked

difference however, viz. In Chronic Gastritis

the pain is more severe, the epigastric tender-

ness more painful, vomiting more frequent,

pulse more tense and also more accelerated.

The tongue in Chronic Gastritis [illegible]

with prominent and altered papillae,

which is not the case in Dyspepsia.

Hot drinks increase pain in the stomach

in Chronic Gastritis, while in Dyspepsia they

weakened state of the system, which
seldom proves [illegible]
disease, which [illegible] in.
Phthisis is supposed by some to have its
origin in Dyspepsia.
Treatment. There is no [illegible] recognized,
which is [illegible] when the
disease of which [illegible] spoken.
Exercise and temperance, are fully sufficient
for the absolute renovation and restoration
of the [illegible] function.
The patient should [illegible] hard
mattress, he should [illegible] late hours,
and [illegible] in the [illegible]
[illegible]. [illegible] should be [illegible], and
[illegible] after [illegible], he should have

[illegible]

[illegible] apartment.

His dinner should be moderate; should [illegible] [illegible] [illegible] [illegible] [illegible], from a physiological point of view, because it has been [illegible] that whenever organ is in action, there is an increased quantity of blood sent to the part for its nutrition, therefore when the stomach is performing its function, [illegible] blood is sent to it, then when at rest, but if the patient [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], the blood [illegible] [illegible] distributed equally to all organs and parts that would be in action, where if he would be at rest, a greater

meal seems unusual. [illegible] [illegible] said that no class of food produces dyspepsia [illegible] [illegible] in [illegible] [illegible] the [illegible].

With regard to the [illegible] of [illegible] to [illegible] [illegible] of, this [illegible] depend on the individual himself. As the old adage says, what is one man's poison is another's food. No two individuals have the same stomach, and there may be idiosyncrasys in the generality of cases. An exclusive a diet is proper, but too great abstemiousness is as much to be shunned as too great an excess. [illegible] your patient to use his own judgement in regard to eating [illegible] [illegible] [illegible]

requirements of [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible]

their vegetables [illegible] of [illegible] [illegible]

more so than that of the [illegible], [illegible] [illegible]

much easier than fat, [illegible] [illegible] [illegible]

soft boiled, more so than [illegible] hard boiled,

milk and the [illegible] [illegible] of jellies

are of exceedingly easy digestion.

Fruits of all [illegible] [illegible] be looked upon

as not being acceptable to the stomach.

With regard to the [illegible] of bread to be

used, there is a great difference [illegible]

the medical profession, corn, rye and

barley make good bread, oatmeal is [illegible]

much used, wheat with the [illegible]

[illegible] [illegible] good. Potatoes when [illegible]

and mealy, [illegible] [illegible] [illegible] [illegible].
Boiled rice mealy [illegible] [illegible] [illegible] [illegible] [illegible]
diet if agreeable to the patient, as it is the
most easily digested of [illegible].
Tender [illegible] [illegible] [illegible] [illegible], and [illegible]
chickens, with their broth may be [illegible]
up for the Dyspeptics [illegible] as they are
very nourishing and of easy assimilation.
We should avoid all culinary vegitables
with a few exceptions.
Sweet Potatoes when well cooked and
mealy also well cooked tomatoes are acceptable.
As to drinks, cold water appears to be the
most efficient. Wine and Liquors are
injurious unless taken during meals and
in very small quantities. Coffee and Tea

should not [illegible] [illegible] [illegible].
The patient should not [illegible] [illegible], [illegible]
at meals as it is [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
of performing its function.
Regularity of habits such as time of taking
meals, also the quantity and quality of
food taken, time of retiring and rising,
free and undisturbed [illegible], and [illegible]
all prolonged anxiety seem necessary to
the cure of this prevalent disease.
Medical Treatment. This is of secondary
importance. Pepsin has of late been brought
into the medical profession, and is [illegible]
[illegible] of great [illegible], when the [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

The generality of the [illegible] [illegible] [illegible]
sufficient to [illegible] the [illegible] [illegible] of food,
it may then be given in the [illegible] [illegible] [illegible]
after each meal in a wine [illegible] [illegible] of [illegible].
As one of the [illegible] [illegible] of this [illegible]
is debility of the stomach, the [illegible] [illegible]
fore indicated are of the class of [illegible]. [illegible]
if there is [illegible] of [illegible]. [illegible] is [illegible]
[illegible] [illegible] [illegible] for the same purpose as the
above mentioned medicine. [illegible] [illegible]
of the accompaniment of this [illegible], [illegible]
[illegible] [illegible] [illegible] by the [illegible]. [illegible]
[illegible] [illegible].

As constipation is one of the ordinary [illegible]
on [illegible], our [illegible] [illegible], after the [illegible]
[illegible] [illegible], [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

but gentle laxatives, such as [illegible]

[illegible].

When there is [illegible] of the stomach [illegible]

may be given in [illegible] the [illegible]

of the stomach is [illegible]. [illegible]

[illegible]

[illegible] and [illegible], and if necessary [illegible]

more effectively, a little Castor bit may be

[illegible], which will have the effect of

[illegible] the [illegible] of

[illegible]. [illegible] may

[illegible] before going to bed, [illegible]

[illegible]

the [illegible] [illegible] most [illegible] beautiful [illegible] and [illegible]. [illegible] of the [illegible] in [illegible] to [illegible] [illegible] and [illegible].

Lastly the mineral springs scattered through our country, of which a visit and a residence for a season would be of great benefit, such as the mineral springs of Bedford, [illegible] [illegible]. The Seltzer and [illegible] waters may entirely [illegible] the [illegible] [illegible].

AN

Inaugural Dissertation

ON

Typhoid Fever

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Charles W. Howard

Of

Adams County, Pennsylvania

Session of 1869 & 1870

Typhoid Fever

The term Typhoid is derived from the Greek and signifies low, weak &c. Fever is a term derived from the Latin denoting as used in medicine a morbid state of the Syst characterized by an accelerated pulse with an crease of heat, impaired functions, diminished strength, and often preternatural thirst. Hence Typhoid Fever should and does signify a low fever; but as used by most medical writers it signifies a specific variety of disease characterized by a peculiar diseased state of Peyers Glands in the small intestines accompanied generally by a low form of fever. However inappropriate the name may seem to be I shall now proceed with the best of my ability to consider the disease termed Typhoid Fever.

Anatomical Characters

A diseased state of the Glands of Peyer seems to be almost as essential to this specific form of Typhoid Fever as the previous particular eruption is of Small Pox. These small glands are found in the lower parts of the ileum and higher up along the jejunum. They are clustered together in spots. These glands in a healthy state are small follicles or sacs. they are embedded in the sub-mucous cellular tissue.

Little opportunity has been had to examine the condition of these Glands before the sixth day of the disease. but after that period they have been examined in every stage. "At first the patches are observed to be thickened and their surfaces elevated one to two or even three lines above that of the surrounding mucous

membrane. The largest are from two to three inches long and from half an inch to more than an inch broad. The largest diameter being in the course of the intestines. Some are smaller and more circular. Their edges are in general clearly defined smooth and regular. but sometimes irregular and ragged. some of them are dark red some pale and others of an intermittent hue.

Louis distinguishes two varieties of these diseased Glands which he denominates as hard and soft varying somewhat in their consistency. The former are hard to the touch. The latter are soft and less elevated. They are generally found more advanced in their morbid state in the lower part of the ileum at first gradually going through the same process higher up. Sometimes even as far

as into the jejunum. The Glands of Brunner are often similarly affected. The hard patches may undergo resolution or ulceration. The soft always undergo ulceration. These spots sometimes mortify and the consequence is perforation of the bowels. Sometimes perforation takes place during the progress of ulceration without mortification of the patches

The mesenteric Glands are as constantly diseased as those of the mucous membrane. Those corresponding with the morbid patches are most affected but not exclusively.

The lymphatic Glands elsewhere are also sometimes enlarged and reddened but less frequently and to a less degree than those corresponding with the diseased Glands of Peyer.

These above enumerated pathological lesions are those characteristic of this disease yet

there is scarcely an organ which does not sometimes suffer more or less during an attack of this disease. Some of these organs are attacked by inflammation others through a loss of vitality undergo a change denominated softening of which we have examples in softening of the heart Spleen Liver Kidneys &c.

Symptoms Course

Typhoid Fever most frequently comes on insidiously. The patient most commonly feels uncomfortable and complains of weariness general uneasiness oftentimes soreness of the limbs. More or less disturbed in his sleep. often a little headache. the skin may be slightly heated the face somewhat flushed; the pulse may or may not be accelerated. the tongue at first very slightly coated; the

Appetite is somewhat [illegible] than usual though most of the time not entirely lost. The other symptoms may thus continue or slowly increasing in intensity with daily remissions for several days sometimes for as many weeks before the patient is taken to his bed. During this period the patient is occasionally attacked by slight chills followed by fever which might lead the practitioner to believe that he has a case of remittent fever forming. When the fever is fully established chillness ceases unless brought on through an attack of inflammation of some organs. The bowels during this stage are often loose and if not so are easily moved by cathartic medicines more so than the incipient stage of other fevers. This tendency to diarrhoea often serves as a diagnostic symptom in this malady.

The disease being now fully developed mani-
fests the usual phenomena of fever frequency
of the pulse accelerated breathing hot dry skin
flushed face pain in the head loss of appetite.
thirst and great weakness. The pulse in this
disease is often not as much increased in
frequency as in most other fevers, generally
not so full and tense though sometimes very
frequent and small, the flush in the face
is of a dusky hue generally with heaviness
and dulness of impression which also serves
as a diagnostic symptom of the disease. The
patient after the fever is fully formed often
feels some pain in the head. Soreness in the
muscles &c. & characteristic symptom of this
disease when present is bleeding of the nose
mostly slight but sometimes very copious.
The above symptoms may continue for

second stage or longer with little change
except a gradual increase in intensity.
The pulse becomes more frequent and weak.
The heat of skin increases, the dullness
gradually deepens; the tongue remains
slightly coated sometimes a thick coat
forms over it, showing a tendency to dry-
ness often appearing red at the tip and edges;
the stomach is sometimes irritable but often
retentive. Transient pains are often felt
shooting through the Abdomen, increased
by pressure particularly in the right
Iliac region and some tympanitic distention
of the Abdomen is discovered upon percussion
with a gurgling sound upon pressure by
the hand, This last is also in part diagno-
stic of this disease. A Cough nearly always
accompanies the complaint either dry or

with expectoration of [illegible] the [illegible] is sometimes changed. Sometimes [illegible] high colored and offensive.

Such may be considered the course of the disease generally until about the middle of the second week from the time it was fully formed.

At about this period of the disease a characteristic eruption makes its appearance upon the abdomen resembling flea bites also small vesicles are found upon close examination upon the neck and upper part of the chest called Sudamina. Now it may be said the fever has become typhoid. The tongue is dry the abdomen tympanitic. Delirium [illegible] Stupor take place, ringing and buzzing in the ears followed by hardness of hearing.

The tongue is protruded with difficulty and trembles. The nervous system seems to be insensible to the amount of disease in the organism.

A considerable number of cases do not assume any more serious symptoms than those above described during their whole course until convalescence takes place yet oftentimes it still continues to advance until a perfect typhous state is established when the tongue generally becomes quite dry often gashed or sore or covered with a brown or black coating and dark sordes collect upon the lips, gums & teeth. The pulse becomes exceedingly frequent and feeble. The surface is hot and dry in some parts while in others it sinks even below the normal temperature, a peculiar unpleasant odor exhales from the body.

Pritching of the muscles and other nervous symptoms often make their appearance. Low delirium with great prostration of all the vital powers now generally come on. The patient is extremely feeble, lying on his back and often slipping involuntarily down in bed. Other and often unfavorable symptoms may yet be added as involuntary stools, retention of urine hemorrhage from the bowels and petechiae and vibices upon the skin; vitality now seems to have reached almost its lowest ebb. Blistered surfaces may slough and gangrenous eschars may be produced in part exposed to pressure

Now if the case is to end unfavorable the pulse gives way becoming either excessively frequent and fluttering or slow and scarcely perceptible; the extremities become cold, clammy

or the whole surface is bathed in a clam sweat. The Abdomen is enormously distended. Hiccough may occur the face become hippocratic and the vital powers are extinguished.

Should a favorable termination take place the tongue begins to moisten and clean gradually at the tip and edges the pulse becomes less frequent and acquires more fulness, the skin relaxes becoming cooler and less dry the delirium and stupor subsides, the appetite slowly returns and in a short time convalescence may be fully established.

Convalescence from this disease is often slow. The symptoms are sometimes again aggravated. When it seems to have been established and yet recovery takes place finally. Abscesses and boils attend this stage of the disease.

Another train of symptoms of a serious nature sometimes occur during the course of the disease and sometimes until Convalescence is established, which are generally fatal, Suddenly the patient is seized with violent pain through the Abdomen &c, such as we have during an attack of Colonitis, caused by fæces of the bowels and the escape of their contents into the Abdomen exciting inflammation.

During the course of the disease, various other incidental inflammations may take place. The lungs are frequently inflamed, the bladder, the serous membranes of the brain lungs and intestines &c, these incidental inflammations whatever organ is attacked them usually assume a typhoid character and require the greatest vigilance

on the part of the constitution to discover them before they have made irremediable changes in those organs affected by them.

Treatment

In a disease called Typhoid we would almost from the name be led to infer that we have always a low Typhoid condition to contend with in the treatment of this very common disease. It is true many cases from almost the very commencement manifest a Typhoid state of the system and consequently require corresponding treatment; but on the other hand it is equally true that in temperate latitudes often cases occur which have very little of any Typhoid symptom

from beginning to end and where an Antiphlogistic course of treatment throughout is the safest; How then should the practitioner proceed when the first need that he meets in the name of the disease which he is going to treat has the very significant term of Typhoid prefixed? My answer would be, closely observe the symptoms of the disease and state of the system, and when you have your case going into a Typhoid state treat it as such and when it holds as an pure inflammatory fever treat it as we rationally treat such a fever, keeping at the same time in view the Pathological condition of the small intestines which invariably are found diseased in this fever.

With these preliminary remarks on my

views of this disease I will now proceed to give the treatment which rationally seems to me to be the best.

As the disease usually commences a mild cathartic may be given consisting of Calomel Rheubarb & Magnesia combined; when mercurials would not for other reasons be contraindicated, Castor Oil or Sulphate of Magnesia can also be used when our object is merely to evacuate the bowels. Drastic purgatives must be avoided as they would only tend to increase the already existing inflammation of the small intestines usually diseased in this fever by the irritation they produce. After the bowels have been gently moved, and the patient does not rapidly advance to a Typhoid State, we may then administer

the nitrate or tartrate of Potash in combination with minute doses of [illegible] Antimony every two hours or as recommended by others the effervescing draught, should there be no tendency to diarrhoea or should the bowels not remain open once or oftener during twenty four hours they should be moved by mild laxative medicines during the above treatment such as rheubarb castor oil or the milder salts when there is considerable fever would be preferable.

If after a variable time the fever should increase the secretions become arrested the tongue becomes more or less dry, the pulse more frequent and the fever still of a sthenic character we may resort to Calomel & Ipecac, in small doses three times a day or oftener if the case seems to demand

it. Care should be take. however in the use of the mercurials not to push them to far in this disease as we do not know what this apparent Sthenic Character and as mercurials even if moderately used sometimes produce great prostration & inducing Salyatism by so doing may afterwards endanger the life of the patient.

The proper time to begin antiphlogistic treatment in this disease will vary according as the disease is Sthenic or Asthenic, whether it has inflammation of any important organ accompanying it or not if the disease is even of a Sthenic character and has no such complications we may commence antiphlogistic early & by doing so we do not increase the fever. If the fever is Asthenic then we should necessarily commence

to support as early as can safely be done
even if accompanied by inflammation
of an organ, our means of support must
consist of wine & brandies Animal broths
& milk, the milk and Alcoholic stimulants
may be combined in the form of Milk punch
wine whey &c administering Alcoholic
stimulants it is necessary to watch their
effects if they are found to increase the
fever accelerate the pulse &c. then can do
no good & should be left off, if they do not
we can safely use them with benefit.
When the fever has in severe cases attained
its height & a perfect typhous condition is
established, indicated by great prostration
feeble pulse frequent or sometimes not
much accelerated, tendon on the teeth &
lips dry tongue and trembling upon

protruding it, tympanitis great, nervous system insensible to pain; then it is our duty to watch all the organs that are apt to become inflamed during this malady, lest we do not discover these often accidental inflammations until they are beyond remedy. If we do not discover any complications of that kind it will be our duty to support our patient and carry him safely through this critical state by the use of wine whey milk punch and animal broths. It is now perhaps that these patches of Ryer are in the worst condition, some inflamed and some ulcerated, the inflammation and ulceration of the lowest grade, and we may do no little good perhaps to these sores by bringing a stimulating alterative in contact with them to assist

the flagging vital powers of the system to change them to a healing condition such a remedy we have in the oil of turpentine & perhaps others of the same class & order might be equally successful for this end.

Tonics are now also indicated if the stomach bears them such as Quinine and other preparations of Cinchona. Should exhausting sweats accompany this stage of the disease dilute Sulphuric with Quinine would be a very good remedy. Opiates when the brain is free may also do good to check them.

Local inflammations must be treated as we usually treat such inflammations in a typhoid state of the system by blistering local bleeding by cups and leeches; mercurials in combination with the

other remedies above mentioned is to
General bleeding is not of the greatest
in such a state of the system.

If a favorable termination is to take
place the tongue will begin gradually to
moisten, the fever diminish the pulse be-
come less frequent if before frequent
the nervous symptoms gradually subside
appetite for food gradually comes on, our
treatment must not be abandoned by reason
as such favorable signs appear but must
be continued until convalescence is fully
established, after which a prudent regard
of the diet will be all that will be required
until the patient regains his usual health.
Hemorrhage from the bowels if it does
occur must be met promptly & the
astringent & acid treatment with opium

is a very good combination other astringents are often used as Catechu Rhatany &c. Perforation of the bowels during the course of the disease must be treated with large doses of Opium but it is difficult to conceive that any remedy can be of much avail when a Peritonitis is set up through the escape of solid fecal matter into the cavity of the Abdomen and there continually acting as a cause of the inflammation and incapable of being removed by absorption or otherwise death under such circumstances seem inevitable.

Diarrhoea should not be interfered with unless the discharges are exhausting too frequent or too copious. it is better that those products of the disease glands in the small intestines together

with the other Morbid excrements to be removed than retained. Should the diarrhoea be exhausting, &c, then it may be best to check this by the administration of Opium (if admissible) if not Acetate of Lead or the vegetable astringents can be used alone

AN

Inaugural Dissertation

ON

Diphtheria

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

J. Melville [illegible]

Of

District of Columbia

Session of 18[illegible]

Diptheria

It is a blood disease, attended with local inflammatory manifestations, which consists of an exudation of false membrane, and is produced principally on the mucus membrane of the pharynx and air-passages, together with enlargement of the lymphatic glands in the neck. There is often some change in the Spleen and Kidneys. albuminuria when present occurring early. It is attended with great prostration, and the

tendency to death. is by asthenia from the effect of the poison. or from apnœa. by obstruction of the air-passages

History

Although this disease has existed from remote antiquity. it was not until the present century that it was fully understood and rightly treated. It is a contagious disease. though the way in which contagion acts is not yet fully known. Neither climate nor season seems to exert any influence on it, as it presents the same features in cold. warm. moist and

dry climates. It presents itself under two forms. Primary and Secondary The Primary is the most common The Secondary is usually a complication, or a Sequela of Scarlet fever, or Measles, or more rarely of Typhoid fever, and is therefore chiefly observed when these diseases are epidemic The two forms are the same in nature, Symtoms, and appearance and the only difference is, that the Secondary is far more fatal, on account of the system being broken down by the previous disease.

Anatomical characters

The first change occurs in the blood but the exact nature of it is not well understood. In those who have died of it the blood has been found of a dark red or brownish color, resembling somewhat prune-juice. It is in part due to imperfect oxygenation of the blood and partly to the malignant nature of the disease. The post mortem appearances of the parts are the same as in life except the color and swelling. The parts that were red generally become pale, though they sometimes retain their red color and when denuded look like a blister. The epithelium is gone

The tonsils are less swollen, and in some cases a collection of pus has been found in them, though they rarely suppurate. The kidneys in the cases attended with albuminuria during life, are congested. In the lungs and brain there is venous congestion, and they show signs of a specific inflammation. There are others which are accidental. Petechiæ sometimes appear on the body, and sometimes clots form in the heart.

Symptoms

These are not always the same.

It often commences with a chill either severe or mild, followed by fever, headache, langnor, and loss of appetite. Sometimes the symptoms are so slight, that they are not noticed till the exudation makes its appearance. In other cases the attack commences abruptly and the patient suffers from severe pains in the limbs and great prostration, which causes him to go to bed from the first. Delirium is rare. Sometimes the swallowing is affected. The tongue has a whitish-gray or yellow color. One or both tonsils may be

covered with the false membrane, and the surrounding mucus membrane has an oedematous swelling. The sub-maxillary glands are swollen In malignant cases the breath frequently has a gangrenous odor, when the false membrane begins to macerate and fall off. The pulse varies in volumn and frequency. It is often full and strong in the first stage of the disease, but if death from asthenia approaches, it becomes feeble and frequent. At first the respiration is only slightly accelerated, but if the inflammation

extends to the larynx, the respiratory symptoms at once become alarming Sometimes Erythema fugax appears for a few hours. Convulsions may occur in young children. Albuminuria occurs in the majority of cases, and generally at the commencement In severe cases the face is pallid, and has a flabby or edematous appearance Sometimes hemorrhage occurs. The symptoms of invasion have but little prognostic value, as some cases that commence with great severity, terminate in recovery, while some that begin mildly end fatally

Sequelæ

After recovery from an attack of Diptheria the patient remains for weeks with a pale and cachectic appearance, and great anemia. Paralysis may also occur, after the abatement of all the inflammatory symptoms and the patient supposed well. It generally comes on about three weeks after the inflammation has subsided. The muscles most frequently affected are those of the pharynx, so that deglutition is often interrupted to such a degree that nutrition is seriously interfered with. It may affect the

motor muscles of the eye, causing Strabismus, or those of one side, causing hemiplegia, or of the legs causing paraplegia, or an arm on one side and a leg on the other. It does not occur simultaneously in the various muscles, but commencing generally in the pharynx, attacks them successively. Sometimes the muscles of the bladder are affected, causing retention, or difficulty in passing the urine. Vision is sometimes affected but it gradually returns as the system regains its usual vigor

Prognosis

It is not very favorable. Age and constitution affect it. The simultaneous appearance of many of the symptoms and the increase of them, especially if the larynx becomes affected, is apt to prove fatal. Laryngeal quality of the voice or cough, and especially if the respiration is greatly accelerated causes great danger. Much exudation in the nasal passages is unfavorable. The occurrence of hemorrhage, or of vomiting and purging at the beginning of an attack, are dangerous symptoms. These symptoms later in the disease indicate either serious alteration in

the blood, or that the disease has attacked the stomach. A rapid pulse exept at the commencement is dangerous, & also if the pulse fall below the normal frequency A sudden rise in the temperature of the body is unfavorable.

Diagnosis

Examination of the fauces, will in the majority of cases, convince us of the presence of Diphtheria When the exudation is not present, the appearance of the fauces in conjunction with the other phenomena will make out the

disease. Diphtheria may be taken for. Simple Pharyngitis, Tonsilitis Pseudo Membranous Croup, Scarlet fever, and Erysipelas. From Pharyngitis it may be distinguished by the membrane being closely adherent to the fauces, by its appearance under the microscope, and by the great external swelling. In Tonsilitis we have little white or yellow spots imbedded in the tonsils which do not coalesce or spread, which when thrown off leave little ulcers. The constitutional symptoms

do not precede the local compli-
cations. In Scarlet fever, the af-
fection of the throat is always
preceded by severe febrile disturbance
which is directly in proportion
to the severity of the attack,
and are persistent. The heat
of skin is great and the pulse
at once becomes very frequent.
which it maintains during the
first few days of the attack.
In Diphtheria frequency of the
pulse is not maintained. and
the respiration is not proportion-
ately accelerated. nor is there any

great heat of skin. In scarlet fever the redness of the throat is uniformly diffused. In diphtheria the redness is peculiar in those parts on which the exudation is about to appear, and around the edges of the exudation already formed. In scarlet fever the papillæ of the tongue are red and enlarged, and tonsils are equally covered with a white layer, which does not increase much, and is detached in shreds. The tonsils may slough and the cervical glands suppurate

It does not affect the air passages.
It runs a definite course and
inflammation of the serous mem-
branes often follows. Albuminuria
is a sequel & and interferes with
the excretory power of the Kidneys
it is attended with Hematuria
and results in dropsy and
anasarca In Diphtheria the
tonsils are not equally affected,
the exudation continues for some
days, and is detached in layers
of considerable density. It does
not run a definite course. In-
flammation of the serous mem

branes rarely follow. Albuminuria is one of the first symtoms and is rarely attended with Hæmeturia. It seldom interfers with the excretion of urea and does not cause dropsy. Scarlet fever is ~~a~~ followed by desquamation of the cuticle, and rarely occurs the second time. These two diseases modify each other but they are not prophylactic In Croup there is no false membrane in the nasal passages, no swelling of the cervical glands, no change of voice

and is sporadic and generally attacks children. In Erysipelas the redness is diffused. There is no swelling and no fibrinous exudation.

Treatment

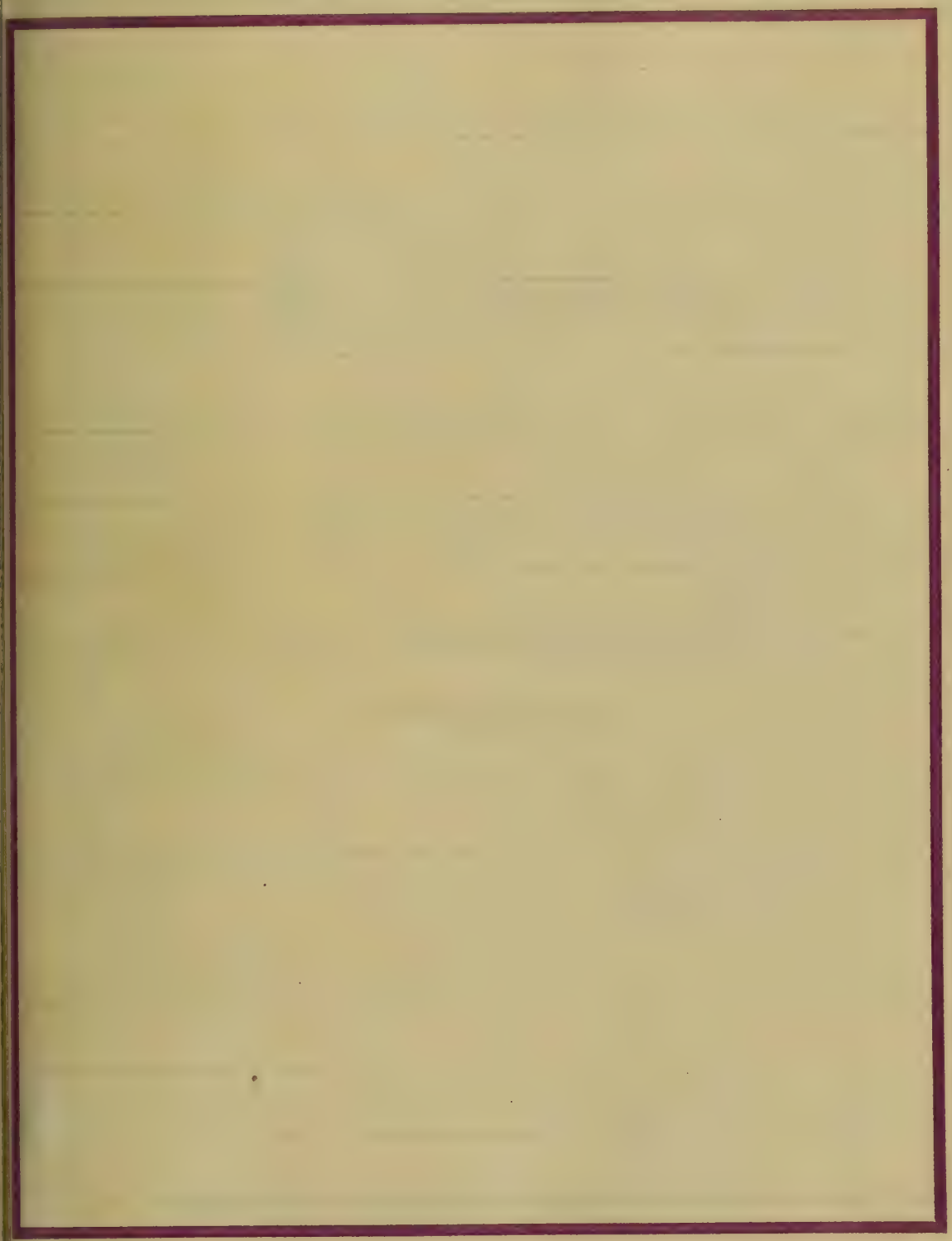
It should be both local and general. The general indication is to sustain the vital powers. Rest and pure air are essential. The first general symptoms should be treated with alcohol and good food freely administered. A rapid pulse calls for its employment. When there is swelling

headache or vomiting, one or two full doses of Quinine will do good. If there is constipation some mild laxative should be given, When the exudation has appeared a solution of Nit silver 5 or 10 grs to Aqua ℥j should be applied to it and the surrounding mucus membrane, As soon as the stomach can retain it the Sr. Ferri. chlo should be given in doses of from 15 to 30 m diluted with Aqua ℥ß and Glycerin ℥ß. every 3 or 4 hours, Permanganate of Potass ℥j to Aqua ℥xxiv ℥j ter die has been highly recomended

Muriatic or Nitro Muriatic acid is indicated in adynamic cases, attended by a small pulse with hemorrhage. When the nasal passages are affected they should be syringed out with a mixture composed of Tr Chlo ferri and Glycerin aa ℥ss with Aquæ ℥iij or Liq. Line 2 or 3 gtts to Aquæ ℥i. Small pieces of ice allowed to dissolve in the mouth is very refreshing. When there is much uncious discretion, a strong solution of Chlorate of Potass is good. When the breath is fetid a mixture of

Hypo. Sulphite of soda ʒiij Glycerine ʒij & Aqua ʒij applied to the throat will do good. Creosote 3 or 4 gtts in ice-water or claret wine is also good. Warm applications externally are good. When albuminuria occurs and the urine is scanty, dry cups should be applied over the kidneys and diluent drinks should be given, and the best is flax-seed tea with a little lemon juice. Diarrhea or a tendency to it should be treated with chalk mixture and some of the vegetable astringents. Hemorrhage requires astringents

When the continued accession of the left parts of the thoracic parietes shows the obstruction to the entrance of air to be increasing tracheotomy should be performed. When the patient is convalescent, he should be careful not to fatigue himself. Good food fresh air and tonics are required. Diphtheritic paralysis requires tonics, and Galvanism



A Thesis

ON

"Kennedy's Aparatus"

to support the Uterus.

Written by

Fredk. Straughn,
Greensboro'
Md.

A

Thesis

on "Kennedy's Shanatus"

to support the Uterus.

Submitted to the examination of the

Provost, Regents and Faculty of Physic

of the University of Maryland, for the

degree of Doctor of Medicine, by

Fred^k Traugott,

of

Greensborough,

Maryland.

February 11th 1870.

In complying with the imperative duty, which your long established rule imposes on candidates for the degree of Doctor of Medicine, and, reflecting on the fact that the field of Medical Science, though wide & extensive, has been discussed with such vehemence & explained with such great talent, that nothing but a duty to your equitable requirement

prompts me to make an effort to produce a "Thesis"

Therefore by special request of my kind preceptor, Dr Kennedy, I refer for your consideration a subject on the instrument heading this article.

I am sure that neither myself nor the profession at large will be startled at this proclamation of any thing new in the shape of Uterine instruments

from the fact that announcements of this sort are so common both in regard to their frequency & value that the perception has rather gained the habit of looking in this direction for new things

But, when in addition to the many excellent qualities, always mentioned in extolling new instruments of this class, one is brought forward that is creeping not more

inally or comparatively so but radically and intrinsically cheap; it will demand attention if it does not create surprise

The instrument can be made by any physician who possess the smallest particle of mechanical ingenuity, in a few minutes after he has examined his patient and discovers the kind of displacement with which he has to do

It consists of

an external bar

Therefore form a ring on one end of the rod, large enough to contain loosely the mouth and neck of the womb, by bending it over a round stick, or with a pair of tinner's pliers having one round blade; this will consume about Three or Three and a half inches of the rod

The rod should now be bent down at right angle to the ring

the short end being nicely fitted to the angle so as to leave no projection

The rod must now be bent into a curve the length and shape directed by the Vagina, taking care that it be so bent, that; an inch from the ring, the rod will stand its centre, and, that, it continue in the centre of the Vagina; This is the stem and will consume as much of the rod as the ring did.

The rod is now in be-
ing inserted at an ob-
tuse angle so as to run
over the pubis and abdomen
The instrument is now
ready for introduction
Therefore place the patient
before you with one foot on
a chair and insert the ring
carefully up the vagina, the
finger can detect the mouth
of the womb projecting through
the ring and will also ascer-
tain if the stem impinges
on either wall of the

vagina, or at its exit

The external rod is drawn over the pubis and abdomen then the gut may be taken from the chair and the rod brought to the median line of the body, slipped through a loop sewn on the belt, and the end which extends above the belt must be bent forward and downwards upon itself clinching tightly over the loop, thus completing the operation, if however the patient be thin of flesh

with abdomen flat, that portion of the rod which covers it should be bent back to fit it, and on the other hand when the patient is very stout and abdomen protrudes far beyond the pubis, the curve must be more gradual from the mouth of the vagina; now if the patient only has prolapsus she will be specially relieved

A good substitute for the kind of metal used, as above stated, may be found

in iron wire covered with rubber, having the rubber cover so closed and adjusted that no secretions from the parts can intrude into it, or, if objections be made to either of the above stated rods; Silver may be used, the latter, however, would rather revoke the recommendation of the instrument; namely cheapness, as the principle of making would be the same; and, in reference to the fastening on the abdomen, if there be any

objections: the one mentioned, which is an elastic belt with a buckle sewn on one end to fasten around the abdomen, we can have a fine choice of many other kinds; only recommending those known, whose low cost will place the instrument in the hands of those for whose benefit it was organized.

Thus a common roller bandage, by taking three or four turns around the abdomen then making the turned end of the two feet to it as we

would to the belt, makes a convenient fastening; a good addition may be made to the bandage, namely a tin quill sewn in so that the rod can be slipped through it and then be clinched

Again the rod may be adapted to any of the numerous abdominal supporters, so called, that are worthless for any other purpose and, probably for the first time, will be put to any advantageous use

Therefore we have a variety of methods to suit convenience

or gratify fancy

Always bear in mind however that the fastening should not be drawn so tight around the abdomen as to force the viscera down upon the uterus thus disturbing their tranquility

So much for the instrument as regards prolapsus uteri

For the versions it needs to be very essentially modified at one point only

First; retroversion, when the ring is formed on the rod

instead of turning it down to suit the vagina, bend it up an inch or inch & a half — and down again forming a cone shaped back the point of which should be at the ring, and the base is made to fit in the posterior cul-de-sac, between the labia & uterus, therefore instead of resting the uterus on a stool it is rested on a chair with adequate support

From the point of the cone, at the ring, the rod is manipulated as has been already

directed for its use in prolapsus

Second; Ante-version, the cone shaped support must be in the anterior cul-de-sac, the rod being bent backwards to gain the line of the vaginal centre and then carried on as before

Third; flexions, the same instrument can be used for retro-flexion and ante-flexion that was described for retro-version and ante-version respectively

A complication frequently occurs, however, in the flexions, namely; when the uterus is restored

it has a tendency to return and often does return partially to its abnormal position; this may be overcome by introducing a small silver male catheter, after the suspensor is fixed on the patient, through as much of the urethra, letting it remain but a few days until the uterus has accepted itself to its normal position wearing the suspensor until the case is cured

That the profession is greatly in need of an instrument for the treatment of the various

displacements of the uterus, bearing the qualities claimed for the one under consideration (Cheapness & Simplicity) no one will deny.

Dr Kennedy does not claim for his apparatus a rivalship with any of the good instruments now in use; because it will be used by an entirely different class of persons; namely, the poor

Dr Bannings is a most elegant and ingenious apparatus and for those who can afford to buy it no other can take its place, but in price it is far above the

reach of the iron, and from its
absolute use must necessarily
remain so

Dr Babcocks apparatus is a
very good one for cases of prolapsus
uteri, one ring of silver is in-
serted, as the inventor states, a gal-
vanic action to the vagina & thus
out in order to wear a silver cup
in one end it would be neither
necessary that the person should be
able to have a silver spoon in
the other

The number of women
who suffer from displacements

of the cities and who cannot
raise twenty grain fields is not very
small, yet their sufferings are
just as severe, and their demands
on the charity of the profession
are just as great as if they were
worth a million

AN

Inaugural Dissertation

ON

[illegible]

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

[illegible]

Session of [illegible] 18[illegible]

thirst, a feeling of stricture of the throat, dilated pupil, dizziness or headache, blood rushing to the face, a fluid overspreading the eyes, morbid sounds, irregular shrinking of the muscles, are [illegible] tons which most commonly appear, though frequently not all in the same case. The symptoms go off by degrees, after having continued twelve hours or more, without any ill effects remaining. There is at times, frequency of pulse and febrile excitement in connection with more or less of the effects; but more commonly, at first, the circulation is little affected, and when the cerebral

phenomena are at their height, is in a greater or less degree lowered. Sometimes the urinary passages become irritated, and an eruption of Scarlet Rash appears on the surface, with frequent increase either of perspiration or urine. Occasionally, also, there is some sickness of the stomache or distressing pain in the bowels, with diarrhoea, giving slight notice of an exciting influence on the alimentary mucous membrane.

Poisonous Effects.

If the medicine be given in over doses we have the effects, which I have already mentioned, in a

still greater degree. There is intense thirst, with a burning sensation in the throat and stomache, with very dry lips, tongue, and gums, which renders swallowing difficult. Frequently there are ineffectual retchings with sickness of stomache; also the urine dribbles away with great pain, and is discolored with blood.

Oftentimes there is great difficulty of speaking, and even at times amounting to Aphonia. The hearing is also defective. Sometimes patients have fixed looks at objects as though they were in great earnestness, but there are without meaning; sometimes

intractable & wild and fierce, sometimes, at times, scheming or contriving, with the face red, rather irregular, and swelling of the face occurring. And the eyes overspread with blood. Soon afterwards dizziness makes its appearance, with the sight greatly deceived, and the patient imagines he sees objects near him which do really not exist, and makes motions suitably or accordingly. Somnambulism has also been observed. The delirium is generally cheerful or gay; pleasing or laughable ideas present themselves; and the patient smiles or breaks out into laughter or makes fan-

testicle gurlings. At times the patient becomes mild or even furious. At length suppression of sense or lethargy supervenes. Sometimes following reciprocally or mixingly with disorder of the intellect, occasionally even in sleep. Partial spasmodic contractions take place; the jaws then close, the muscles of the face working, and those of the hands work irregularly; though very rarely, convulsions sometimes occur. The pulse is now very feeble, the extremities cold, a disposition to Syncope evinced; and, if the case terminates fatally, great prostration, Subsultus Tendinum

and profound insensibility precede death. It is said that the poisonous effects of this medicine have been experienced by injecting it into the rectum, also by applying it to blistered surfaces, and even seen in the employment of large cataplasms over the abdomen, where the cuticle was unbroken. It is impossible to approach with accuracy to the quantity necessary to produce any fatal effects, according to the variation of constitutions in patients. Two grains of the extract have produced symptoms which gave notice of approaching danger. Similar effects have been noticed from the

administration of six grains by Enema;
while it is asserted by Christison,
"that a pound of the berries were eaten
by a man, on one occasion, who
nevertheless recovered under treatment."

There are few if any, accurate accounts
of the appearance by the poisoning of
Belladonna. In general, the stomache
presents signs of some irritant action;
and in recorded cases, the vessels of
the head were found engorged and
the blood was fluid. The effects of
Belladonna on animals inferior
to man varies greatly. The carnivorous
animals eat this plant with production
of the same effects as in man.

There is mention given of occasions in which the horse, the Ass, and the rabbit have eaten freely of this plant, without any or at least no observable symptoms, while dogs are poisoned.

Mode of Operation.

Belladonna is a powerful stimulant to the brain, is also a feeble local irritant, and effects the circulation with moderate excitement. If absorbed it also acts upon the system. There are facts recorded showing that to whatever surface it may be applied, the same effects are produced, even when introduced into the blood. Its active

principal has also been detected in the urine. It has been stated that the application of urine of herbiverous animals, after they have eaten the fruit, has produced dilitation in the pupil of carniverous animals.

The circumstance that this plant as well as others of the same natural family of narcotic plants, is eaten by some animals without any injury arising from it, while others it kills; this proves that the medicine acts on the sensibility of the tissues, and not by a chemical reagency upon their organization. One of the most curious effects from this med-

icine, and other narcotics, is that which they exert on vision and the pupil.

The effect of Belladonna is much more prompt and quite as great, if not more so when applied locally, than from its internal use. The dilitation of the pupil can probably be attributed to a complete relaxation of the contracting fibres of that membrane, through an influence on the ciliary nerves. But under these circumstances, the nervous centre of the retina is therefore not acted on, and the sight is not affected. Sometimes both eyes are affected from the application of the medicine to the one eye; but generally

only the eye to which the application is made becomes affected. Belladonna may act as a quieting medicine to the nervous centres of vision, while it stimulates the other cerebral centres; but it may also be possible that the decrease of function may be the result of a prompt congestion of the centres, or when the medicine is locally applied to the nervous peripheries, sufficient to suspend their functions, and, as it were, put them to sleep.

Therapeutic Application.

It is not positively known whether Belladonna was used by the ancients as a medicine. It appears to have

passed from experimental use into the hands of the regular profession about the close of the Seventeenth century. It was supposed sometimes to effect cures in cancerous tumors and ulcers, for which it was at first chiefly valued as a remedy; and cases were recorded which would go far to confirm this opinion of its powers, did we not know how often diagnosis has led to false conclusions of the virtues of medicines in these affections.

Indications.

The chief indications which Belladonna is calculated to fulfill, are 1st To subdue pain: 2nd To relax

muscular spasm and rigidity; 3rd To stimulate the nervous centres; and 4th In reference specially to the eye, to lessen sensibility of the retina, and dilate the pupil. I will now proceed to treat of the complaints for which Belladonna is used, according to the indications above mentioned.

1st For the relief of Pain.

In neuralgic affections there are but few medicines which produce a more effectual cure than this; and in these it displays its most useful powers. It is immaterial where the pain is seated, provided it be purely functional, that is,

when it is connected with no other inflammatory or organic disease affecting the nerve or its centres; the medicine may then be employed. It may be used both internally and locally; and when the pain is seated so that we have a near way by which it can be reached, we should, as a general rule, depend upon the local use of the remedy, or it should be employed in both methods jointly.

Quantities should be administered sufficiently large to produce manifest effects, but not in doses to cause delirium, stupor, or dimness

of vision: approaching blindness;
though it is seldom if ever that
these latter phenomena prove
really dangerous, when arising from
medicinal doses, yet, therefore
they are better avoided, as they are
not necessary to the anodyne
effect. There are various neuralgic
affections in which Belladonna
may be used, namely; neuralgia
of the scalp, supra-orbital neural-
gia or that of the eye-ball, facial,
infra-orbital and sub-maxillary
forms; neuralgia of the limbs or
trunk, in the affections of the
abdomen, as gastralgia, enteralgia,

nephralgia and others, such as lead colic and nervous colic which are really forms of intestinal neuralgia, and may be treated with advantage in their milder and more chronic conditions, with frictions with an ointment of the extract externally over the surface of the abdomen, also Belladonna combined with Alum or Iodide of Potassium internally.

2nd For the relief of Spasm of muscular Rigidity.

There is more benefit derived from Belladonna in pure neuralgic pains or spasmodic affections without pain, than in affections where the spasm is more painful. Thus, spasms of the

stomache, and bowels, ureters, hepatic ducts," and those of Tetanus do not yield readily to Belladonna, perhaps because the centres of irritation in these cases are in the sympathetic nerves or spinal marrow, upon which that narcotic may exercise more power than on the cerebral centres." There are cases on record from which some good effects have been produced from the administration of Belladonna in Tetanus, and colicy affections. Where there is Spasm without pain, great benefit is often derived from this medicine.

It has been highly recommended

in hysterical women, in the non-epileptic convulsions, and also in children, but should not be given when in doubt of inflammation, or in any active cerebral congestion. It has been strongly recommended internally in Asthma. It is also given locally in muscular rigidity, and has been found to be very useful in a number of different affections.

3rd To stimulate the Nervous centres.

In reference to this indication, it has been asserted that Belladonna is used in certain conditions of paralysis with success, particularly in cases where the lower half of the

body, including the bladder and rectum, have been palsied. It is said also to have proved useful in amaurosis; but here also the affection should be purely functional to justify its employment. In cases of melancholy forms of insanity Belladonna has also been used; and it is probably useful in cases similar to those in which opium proves advantageous; but it is so much inferior to that narcotic, that, unless some special objection to opium may exist, it would scarcely be worth while to employ it. When complicated, however, with neuralgic pains, the disease would

body, including the bladder and rectum, have been palsied. It is said also to have proved useful in amaurosis; but here also the affection should be purely functional to justify its employment. In cases of melancholy forms of insanity Belladonna has also been used; and it is probably useful in cases similar to those in which opium proves advantageous; but it is so much inferior to that narcotic, that, unless some special objection to opium may exist, it would scarcely be worth while to employ it. When complicated, however, with neuralgic pains, the disease would

present a much stronger indication.

4th In reference to its influence upon the Eye, there are two objects for which Belladonna is employed in diseases of the eye; one to diminish the sensibility of the retina or optic nervous centres and the other to dilate the pupil. With the first object, it may be employed in that not uncommon condition of the eye, in which, altogether independently of inflammation, light is extremely painful to it, and, though the vision is in no degree impaired, the use of the organ for any length of time is impossible, in consequence of the pain induced. In similar sens-

this which attends Ophthalmia, it has also been used; though in the latter condition, its advantageous is more equivocal. Surgeons use Belladonna very extensively for dilating the pupil. It is the local application of it that is resorted to for this purpose. The infusion of the leaves, or solution of the extract may be dropped into the eye; though the Sulphate of Atropia is the one most frequently employed.

Administration.

There remains but little to be said, upon this point, after what has been stated above. Belladonna

may be given in substance, infusion, extract, or tincture; and exclusively for external use there are two officinal preparations intended, namely, the plaster and ointment. The commencing dose of the powdered leaves is one or two grains, to be repeated two or three times daily, and to be gradually increased until the effects of the medicine are produced. When the leaves have not been injured by time, ten or twelve grains daily cannot be exceeded without inconvenient effects. The dose of the infusion at first is one half to one fluidounce two or three times daily, and may be increased as in the case of the powder. In this coun-

by, however, the medicine is much more used in the form of extract than in any other way. The U. S. Pharmacopoëia directs two extracts, one of which is the inspissated juice, and the other is prepared by means of diluted Alcohol. The extract is administered in doses of from one-quarter to one-half a grain twice or three times a day, gradually increased, if necessary, until some signs of its action is produced.

The Alcoholic extract is administered in doses of half a grain to begin with. The dose of the tincture is from fifteen to thirty drops.

AN

Inaugural Dissertation

ON

Chloroform in Practical Medicine,

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Henry J. Houck

Of

Maryland.

Session of 1869-70.

Introduction
to
Functional Medicine.

Introduction —

by experiments, and as we have it now a recognized science, its laws are but the deductions from experiments, we experiment — we get a result, but why does it result as it does, why does it not result the opposite?
We find Chloroform to produce so complete an aesthetic power as to occasion death; why does it not act the opposite and make one more susceptible and more sensitive? You would say that is not its action on the nervous system — we know that, but why is it not? you would say that you do not know — plain, honest conclusion, but truth.
Our subject may come under the same

trac of thought: we theorize and we wish here to demonstrate our theory in striking, beautiful and patent facts; but have we a cause to theorize, have we any grounds to get the suggestion to base our theory upon? We know the effect Chloroform produces upon the system by inhalation. The man of strength, of vigor and muscular development is deprived of his strength, his members lose their tonicity, become devoid of sencibility, and sink into a deep sleep as it were – the somnus mortis – when his lungs drink in this potion, the child with its delicately formed tissues and organs, its feeble nervous system

hushes its instinctive cry under the influence of this agent, while the surgeon severs from its body one of its members — Now from this we theorize. By what means does it produce such results? we find it produces them through the agency of the nervous system. Well, if chloroform produces such as the above mentioned results by inhalation, which is an established fact, why will it not produce similar or as great results by administration in substance? we think it will, and we will adduce facts to substantiate our point. At present there are few medicines more employed, and

was first employed medicinally by Dr. Peters of New Haven, in the year 1832, both by the stomach and lungs in asthma, spasmodic coughs &c. In 1838 it was used by Dr. Formby of Liverpool in Hysteria, and in 1843 Tuson of London as a local anodyne. About the same time in Paris by M. Guillot, in asthma. In 1847 M. Florence made experiments with it upon animals, proving its anesthetic power, but it was not until after the determination by Dr. Simpson of Edinburgh of its extraordinary efficiency in relieving pain when inhaled in the form of vapor and of its applicability for

the purposes in the Practice of Surgery and Obstetrics, it came under general notice.

I shall now attempt to give a brief account of the Therapeutical application in Practical Medicine. It may be described as a stimulant and narcotic. In the earlier part of its action, and in cases in which it is given undiluted, considerably diluted with air it is a stimulant, increasing the frequency and force of the heart's action, and by exciting the sympathetic nerves causing contraction of the arteries. In the later stage of its action it depresses the force of the circulation, causes

such a suspension of the influence of the sympathetic nerves distributed to the blood vessels, that the latter become dilated instead of contracted, and induces narcosis or state in which there is paralysis in a greater or less degree, first of the nerves of sensation, and secondly of the nerves of motion, thirdly of the nerves of organic life; therefore we administer it to relieve pain, second to relieve spasm, third to promote sleep; its action as a stimulant is simple and uncomplicated, similar to that of alcohol, ether &c its action as a narcotic is compound & made up of

paralyzing effects in unequal degrees upon the three great divisions of the nervous system. In Practice of Medicine, Chloroform may be employed either as a stimulant or narcotic; as the former it increases force, subdues spasm and relieves the slighter forms of pain. as the latter it can abrogate pain, abolish a spasm, paralyze muscles and depress force).

Chloroform in diseases attended with pain. Neuralgia, in the treatment of this affection, Chloroform has proved extremely valuable; no remedy is more speedy, and for a time more efficacious; in most instances it is

a mere palliative, having no control over the real pathological condition in which the pain originates, though sometimes the pain being relieved, the morbid chain of association seems to be broken, and no return takes place at least for a considerable time; it is moreover brief in its action in proportion as it is quick, for a few inoperations will take away pain altogether, but it is often times necessary in order to sustain the anodyne impression to repeat the application at short intervals. It may be applied locally by a piece of lint moistened with chloroform and laid upon the

affected part; it may also be rubbed in; a similar treatment may be used in Neurodynia. In cases of more severe neuralgia, narcosis must be induced to the first or second stage. After narcosis is complete, the chloroform must be removed, and only applied upon the return of pain. Narcosis may be carried to the third stage in neuralgia involving the fifth pair of nerves, from the fact that they arise so near the vital point. The third stage should not however be long maintained; it is better to let the patient recover completely to disembarrass himself of the chloroform, and then repeat

the inhalation. In spasmodic muscular affections as chorea chloroform has been tried with good effect; at first the intensity of the movements are increased, but a perfect calm soon succeeds, and then a sound sleep.
Dr. Pouchardt relates a case of a girl, in which severe chorea had lasted twenty one days; she was subjected to the influence of chloroform, at first twice, and then three times a day, and then once a day, in all twenty seven times in fourteen days; at the end of this time she was perfectly cured.
In Tetanus, chloroform induces wonderful relief, but cannot be said to

cure. I have seen it used in this dis-
ease in the Baltimore Infirmary, and
I am sure that it greatly alleviated his
pain, for after all other remedies had
failed, chloroform was then resorted to
and carried to the third stage of
narcosis. In five minutes the legs, pre-
viously rigid and immovable became
flaccid and freely movable, the abdom-
inal muscles became less tense, and
the arching of the spine disappeared,
the pulse sank to eighty five beats,
the jaws firmly locked were easily
opened, and we were in this way
able to give nourishment as we desired,
its effects lasted for about fifteen

minutes, when the symptoms of the disease returned with increased severity, not from the effects of the remedy just used, but in the natural course of the disease, with each returning spasm the Chloroform was administered by inhalation, more with a view to palliate the agony, which the patients distorted Countenance expressed than with any hopes of permanent relief, as the severity of the spasm increased, in the same proportion was the Chloroform found to lose it efficacy to relieve, until it finally became useless, and the unfortunate being after many fruitless attempts

to force open his jaws with his hands, yielded them to death's keys to be locked forever.

As an anesthetic in Obstetrics it has been satisfactorily ascertained that under the influence of this agent the pain ordinarily attendant upon uterine contractions in child-bearing may be entirely annihilated without in general interfering in the least degree with the efficacy of the contractions themselves, whether in relation to frequency or force; and this may be obtained without carrying the inhalation so far as to suspend consciousness, but how far

anæsthetic practice may be desirable or justifiable in child-bed, or if employed at all, under what peculiar circumstances is the most appropriate one questions which belong to the obstetrician to solve: the object here is to show Chloroform as it is divested of all its imaginary terrors, so that the practitioner may not be deterred from using it by any unfounded fears, if he believes it to be indicated. It has been used to advantage in infantile convulsions. A case has been recorded by Dr. Simpson, in which chloroform was used successfully

where all ordinary means had failed, this form of treatment has been adopted, that is to administer it during the fit, it abates the violence of the muscular movement, calms the spasmodic inspirations, and quiets the whole system. It may be administered to children of any age, suffering from this affection.

"Chloroform Vapor" may be used happy with effects in all spasmodic coughs In spasmodic asthma, the inhalation of it is beyond doubt one of the most powerful methods of the treatment of the asthmatic paroxysm.

that we possess as it is also recommended one of the most recent, it has been objected that it is apparently dangerous to administer it to patients suffering from dispnoea, and with symptoms of semi-suffocation; the imaginary grounds of this objection are two fold; first, that the vapor is pungent and irritant. Second, that the nature of the anesthetic is to cause death by suffocation, but properly diluted, it is not pungent, and instead of increasing any tendency to spasm, it at once relaxes it. The dispnoea being due to bronchial spasm, the chloroform

will relax spasm and set the pulmonary circulation free, and thereby will relieve the distress. In many cases it not only relieves the for oxygen, but prevents or postpones a recurrence, and thus becomes a directly curative agent; for this cause it must usually be administered to the second degree of narcotism.

I will now state the different modes of administering chloroform. By the stomach, rectum, inhalation and topically; either in the liquid form or that of vapor. The dose for internal use may be stated at from gtt 40 to 80, which may be repeated

every half hour or hour, and gradually increased if necessary until the desired effect is obtained. It should be given in emulsion. The quantity to be given by enema varies from ℥ss to ℥i. For inhalation, ℥i. and may be repeated in two minutes, if the desired effect is not attained. The great principle which should govern the process of administration is that sufficient atmospheric air shall be taken at the same time to support respiration, and the vapor inhaled should not be so concentrated, as to endanger the entrance of too large a proportion

into the blood. The most convenient way to administer it by inhalation, is to fold a towel funnel shape, pour the chloroform upon the inside and place it over the nose and mouth of the patient, taking care not to allow it to come in contact with the skin, as it will vesicate; always be careful, as before mentioned, to allow a sufficient intermingling of pure air.

N. J. Houck,
&
Frederick City,
Maryland.

In

Inaugural dissertation

On - Epilepsy.

Presented for examination to the Provost, Regents and Faculty of Physic of the University of Maryland

by

Walter Henry O'Neal of Gettysburg Pa

On his application for the degree of

Doctor of Medicine

1870

Dedicated

to

Richard McIlvaine M.D.
Professor of Principles and Practice of Medicine
University of Maryland

By his obliged friend

The Author

The human body is a collection of [illegible] [illegible] which [illegible] the frame: In viewing its construction we are led to the consideration of the principles which keep it in existence and the means by which it may be preserved.
The principle which maintains the existence is the vitality or life.
The mode of its preservation is reduced to a science.
Life is a state of organised matter in union with an immaterial imponderable principle which enables the body to act well its parts.
The science which tends to lengthen the duration of this immaterial principle with the body is known as the [illegible] of Medicine — [illegible]

much improved, and yet no many complaint. Thus it is that much has been done, yet all [illegible] remains to do.

[illegible] medical science be brought to that perfection which [illegible] once [illegible] through the [illegible] of mathematics or more recently [illegible], [illegible] [illegible] a want of quickness in penetration and sagacity, which so much [illegible] the [illegible] practitioner, would be overlooked and considered with indifference.

[illegible] for the welfare of humanity [illegible] we might hope it was so; but, for the [illegible] of the [illegible] for the improvement of science,—we are satisfied that it [illegible] a

more elevated [illegible], and [illegible]
[illegible] opportunity [illegible]
of that presence [illegible]
[illegible]
and [illegible]
the successful practitioner.
Medicine as an art, should [illegible]
by the means [illegible]
removing disease, [illegible]
~~actuated [illegible]~~.
[illegible]
immagin[illegible]
to [illegible].
Especially when we look at [illegible]
history of the past, and [illegible]
with [illegible] much tenacity, our ancient
fathers adhered to the charms and
incantations of [illegible], whose [illegible]
[illegible] to [illegible].
[illegible] medicine [illegible]

we find a connection or
union with theology. Egypt was
the birth place of Medicine as of
[illegible]
[illegible]
[illegible]
[illegible]
the principle of cleanliness was
enforced to prevent contagion.
Where the centaur is said to have
introduced the art of medicine
amongst the Greeks.
With a hoping allusion to the
names of Pythagoras, Democritus
and Heraclitus who in their
various departments may be
regarded as having advanced
the art of medicine we arrive
at the time of Hippocrates.
It advances that [illegible]

[illegible]

His sons Thessalus and Draco and his soninlaw Polybius are regarded as the founders of the [illegible] sect which was called the Hippocratean or dogmatic school, because it professed to set out certain theoretical principles which were derived from the generalization of facts and observations and to make these principals the basis of practice. [illegible] circumstance [illegible] [illegible] of medicine [illegible] the establishment of the school of Alexandria which was affected by the munificence of Ptolemies

about three hundred years before the christian era.

Among the [illegible] of its medical professors Erasistratus and Herophilus. The former was the pupil of Praxiphus and probably imbibed from his master his [illegible] against bleeding and the use of active remedies, preferring to trust mainly to diet and to the "vis medicatrix natura".

It was about this time the empirics formed themselves into a distinct clak and became the declared opponents of the Dogmatists. "In controversy says Bretick in his history of medicine nally consisted [illegible] [illegible] [illegible] [illegible] to suffer theory to influence our practice, while the Dogmatists

(or as they are sometimes styled)
Rationalists, asserted that before
attempting to treat any disease
we should make ourselves fully
acquainted with the nature and
functions of the body, generally,
with, the operation of medical
agents upon it; and with the
changes, which it undergoes when
under the operation of any morbid
cause.
By [illegible] on the contrary,
contended that this knowledge is
impossible to be obtained, and if
possible, is not necessary, that
our sole guide must be experience,
and if we slip [illegible]
[illegible] as learned from our own
observations, or that of others on
whose testimony we can rely, —

we are always liable to fall into dangerous and fatal errors.
According to Celsus, who has given an excellent account of the leading opinions of both sects, the founder of the [illegible], of [illegible], who was said to be a pupil of Herophilus.
We [illegible] from Pliny the naturalist that medicine was introduced into Rome at a later period, than the other arts and sciences.
The first person who seems to have made it, a distinct profession was Arcagathas, a Peloponnesian who settled at Rome about 200 B.C.
His treatment was so severe and unsuccessful that he was finally banished, and we hear of no other Roman Physician for a [illegible]

[illegible]
Antiquia acquired a [illegible]
reputation.
His popularity depended upon
allowing his patients the free use
of wine and their favourite dishes
[illegible] consulting
their inclinations and flattering
their prejudices and hence it is
easy to understand the causes of
his general and [illegible] reputation.
He was succeeded by his pupils
Thomson the founder of a sect
called Methodics and who adopted
a middle course.
The most remarkable writer of
this age is [illegible], whose work gives
a sketch of the History of Medicine
up to his time.
He is remarkable as being [illegible]

Roman Physician whose name has been transmitted to posterity.
It was in the fifth century that the sect of Chemical Physicians arose. They maintained that all phenomena of the living body may be explained by the same chemical laws, as those which rule inorganic matter.
Although the illustrations and proofs which they adduced were completely unsatisfactory a distinguished Physiological school of the present day is merging into a very similar view, with far more cogent arguments in its support.
The chemists of that age with Paracelsus at their head, did nothing to advance Medicine

except [illegible] into the
Materia Medica several valuable
metallic preparations.
This period seems to be prolific
in originating new diseases, it
is in the thirteenth fourteenth
and fifteenth centuries that we
hear most of Leprosy, and of the
visitations of the Plague in Europe.
Until the fifteenth century,
whooping cough and scurvy were
unknown or at all events not
described and it was towards the
close of that century that syphilis
was first recognized in Italy, from
which [illegible] it rapidly extended
all over Europe and that the
[illegible] sickness made its first
appearance in this country.
In the sixteenth century the study

of of human anatomy may be
said to have been fairly established
by zeal and labours of Bisalious
and in this and the succeeding
centuries we must with the
names of many Physicians whose
Anatomical and Physiological
investigations materially tended
either directly or indirectly to
advance the science of Medicine.
In Physicians of the seventeenth
was Sydenham who though
inclining towards the chemical
school did not allow his
speculative opinions, (regarding
the nature of the disease,) to
interfere with his treatment.
The most eminent teacher of
Medicine of the Eighteenth
century was Boerhaave, who was

[illegible] in the [illegible]
in Leyden in 1709
The present century may be consid-
ered as the epoch of physiological
experiments and clinical observation
[illegible] in the [illegible] of Medicine
during the last sixty years have
been so extensive that it would
be impossible to notice in this
article even the portion we deem
most [illegible], which it would
be invidious to attempt a selection
[illegible] has revived a
large number of most important
additions, amongst which may
be noticed Quinine, Morphia
Strychnine, Iodine and the Iodides
and Bromides, Hydrocyanic Acid
Cod Liver Oil, Chloroform and
Hydrate of [illegible].

The Physical Diagnosis of disease has be facilitated to an extent far beyond the expectations of the most sanguine physicians of the last century, by the discovery and practical application of the Stethoscope, the Pleximeter, the Speculum, the Ophthalmiscope, the Laryngoscope, and the Hypodermic Syringe, while Chemistry and the Microscope have been successfully applied to the investigations of the various excretions and especially, the urine and its deposits.

The invention and discovery of vaccination as a means of preventing small pox (although made at the close of the last century,) may be regarded practically as belonging to the present; since a considerable

time [illegible], before its [illegible] was [illegible].
With these slight allusions to the past we are brought to the consideration of our subject, the notice of which it is hoped will be both interesting and profitable.
Physiology teaches us (says Watson) that the brain is the foundation of sensation thought and voluntary motion.
The influence of the will is a cerebral influence. It reaches and acts upon the muscles through the interposition of the spinal cord. Motions that are involuntary belong more exclusively to the system of the spinal marrow.
Yet, cerebral changes, (mental states of the brain) may excite them.

All functions are liable under disease to be separately affected and each in various ways and degrees.
At the same time these groups have strong resemblance to each others. They are of the same family. Occasionally they are so near alike that we find it somewhat puzzling to determine with which of the sisters we are conversing; but usually there is some marks or other symptoms by which the individual may be identified.
Of these [illegible] nervous diseases there are several in which the most prominent and obvious of the phenomena relate to the muscular system, [illegible]

[illegible], [illegible] the
most [illegible] changes, [illegible]
with time & [illegible], [illegible]
sensibility undergoes no other alteration
than what is a consequence of
[illegible].
Striking illustrations are Hydrophobia
and Tetanus pain in the muscles with
disturbance in the intellectual.
[illegible],
[illegible]
ungovernable by the will are characteristic
[illegible].
The disease which I have under
consideration is scarcely less [illegible]
to witness than Tetanus or Hydrophobia,
but it is not attended with the
[illegible] and immediate [illegible]
[illegible]
[illegible]

[illegible]

[illegible]

[illegible] A [illegible] immediate [illegible]

[illegible]

[illegible] perpetual anxiety and dismay among those whom it has once visited.

The leading features of Epilepsy are [illegible] suspension of conscious [illegible]

[illegible]

[illegible] to [illegible] a perfect definition of Epilepsy so various are its forms, so numerous are its modifications, [illegible] of it, can be given. [illegible] the most [illegible]

[illegible]

then note the several variations which occur in practice.
[illegible] suddenly utter [illegible] instantly senseless and convulsed.
The strains and struggles violent.
[illegible] turgid, and livid; he foams at the mouth, eyes open with a stare, a choaking sound is heard in his windpipe, he appears to be at the point of death, [illegible]. But [illegible], and [illegible], [illegible], at length [illegible], the patient is left exhausted, heavy, comatose, stupid, but his life is no longer threatened, and in a short time, he is once more [illegible] perfectly well.
The same [illegible] of morbid phenomena, occur again, [illegible]

twisting of the neck, the chin being raised and brought around by a succession of jerks.

The one shoulder and side of the body is usually more strongly agitated than the other. The features are always greatly distorted. The brows are knit, the eyes sometimes quiver and roll about, sometimes are turned beneath the lids, so that the cornea cannot be seen and the white scorotica alone is visible. The mouth is twisted and awry; the tongue is thrust between the teeth and caught by the violent closure of the jaws, is often bitten severely; the foam which issues through the mouth is reddened by blood.

The hands are firmly clinched and the thumbs bent inward upon the

[illegible] of the [illegible].

[illegible] are [illegible] about striking the chest of the patient with great force or [illegible] themselves against surrounding object or inflicting hard [illegible] upon friends and [illegible].

It frequently happens that the urine and excrement are involuntary expelled during the violence of the spasm and sometimes seminal emissions are a consequence.

The spasmodic contraction of the muscles is occasionally so powerful as to form dislocations, the joints of the jaw and shoulder have thus been put out of place and the teeth are sometimes fractured, when the convulsive paroxysms are over the patient falls into a deep sleep, often into a state of complete coma

or rather the insensibility continues after the convulsions have ceased. When the sufferer wakes there is a confused and incoherent condition to degrees lower the ordinary appearance is resumed but memory makes no record of the occurrences passed during the fit.

During the paroxysm the breathing is irregular, gasping or arrested, the lungs palpitates violently the pulse becomes frequent and feeble and sometimes seems to have ceased

The swearing of the face indicates obstruction of the venous circulation, and the cheeks and lips become purplish, and livid, and the veins of the neck and forehead are visibly distended.

This is the most severe, and most common as well as the best marked [illegible] manifests itself.

There is a large [illegible] of cases in which the symptoms are much more mild and varied.

There is very slight and transient or even no convulsions at all, no turgescence of the face, no foaming at the mouth, no cry but a sudden suspension of consciousness, a short period of insensibility, a fixed gaze a tatter [illegible] a look of [illegible] the patient does not fall.

[illegible] the patient resumes business and is not always aware it has been interrupted.

Sometimes with this temporary [illegible] of the mental functions there is slight evidence of convulsion or involuntary action, the fingers of one hand or lip commonly of both are moved irregularly, but without any object; or the eyes are rolled, or are turned upward, or the muscles of the face, are twiched.

Sometimes the patient aware of what has been his condition shows some [illegible] in endeavoring to conceal it.

The slight attacks are called Epileptic Vertigo, and distinguished by that appellation from Epileptic Fit.

Affections so different in degree and in some respects so dissimilar in character, whilst coming from

the same exciting cause may be
questioned as regards the nature.
That they are [illegible] of the same
stamp we have this evidence, that
both forms of the attack occur in
the same individual, sometimes the
sufferer will have [illegible] recurrences
of the Epileptic [illegible], and at
another will become affected with
violent Epileptic fits,
Or the forms will intermingle
sometimes the milder happening, again
the severer.
In such cases we cannot doubt that
the attacks have a common cause
though different in form and
degree.
And when we meet with the slighter
forms, alone, we cannot refuse to
assign it to the character

name of Epilepsy.
Between the two extremes there are many links of gradation.
Sometimes the sufferer sinks or slides down quietly without any noise, is pale & not convulsed, but insensible, much like one in a state of synaph. After recovering he remains sick languid and confused during the remainder of the day.
From what I have said it may be seen that it is a very difficult to give a single description of Epilepsy which will include all its varieties. It is still more difficult to give a strict definition of the disease. Doct Copeland furnishes a larger and more comprehensive definition than any other: Sudden loss of consciousness and sensation with [illegible]

contraction of the voluntary muscles, quickly passing into violent [illegible] distortions, attended and followed by deep [illegible], recurring in paroxysms often more or less regular.

The periods at which the paroxysm occur are extremely variable.

Occasionally the patient dies in the first paroxysm, occasionally though he recovers from it, he never has another but these recurrences are rare.

Rather more frequently the [illegible] recur at very long intervals at the distance of many years.

Most commonly they visit the sufferer at irregular periods of a few weeks or months.

Sometimes they are repeated at

intervals of a few days, again every day or night and not even more frequently.
The time of life at which the fits commence and the circumstance attending their commencement are deserving of notice. The epileptic attack may come on for the first time at any age. According to Dr Bright the most common periods are about the age of seven or eight years probably about the time of the second dentition and from fourteen to sixteen shortly before the age of puberty.
But sometimes the first fit has taken place between the ages of thirty and fourty and even sixty. In infancy the nervous system

is delicate and easily acted upon by various causes of irritation. These & show the period of teething [illegible] to [illegible] and dentition coming. A few years latter all the [illegible] [illegible] connected with [illegible] [illegible] the [illegible] the [illegible] and [illegible] to manhood and after the lapse of years, the vigors of the system fail and many causes act to derange the nice balance of the system. ~~and~~ The [illegible] often become sluggish, changes more or less serious take place in the structure of the arterial and venous systems, and many causes, organic and functional which had been before [illegible] to [illegible] [illegible] on the nervous [illegible], acquire power from its relative [illegible].

The first accession of the disease
takes place more commonly before,
than after, puberty.
The attacks often come on during
the night; just before going
to sleep, or just after waking
up [illegible] are
very irregular.
Sometimes each paroxysm arrives
unannounced and unexpected,
sometimes distant warnings of its
approach are given.
The latter is [illegible] frequent than the
former. The kind of notice which
the patient receives is variable indeed.
Often it consists of some unnatural
state of the mind, the patient
fidgity irritable, low spirited timid,
sullen or on the other hand, he
feels unusually strong and hearty

and cheerful.
Headache, giddiness, dim or [illegible] vision, are all of them common [illegible] among those who have been [illegible] of the [illegible] symptoms of Chicksy.
Sometimes there are circumstances which are obvious to [illegible], a [illegible] of the face or lividity, difficult articulation vomiting.
Some of the uneasy feelings are apt to come on and continue for several days previously to the attack: restlessness in particular disturbed sleep; distressfull dreams, a [illegible] and sudden coldness of the extremities; an internal working is a phrase of used by such persons, as experience a sensation which is probably indescriable

But the most curious precursory symptom if except the spectral illusion, is what is called the Epileptic Aura,

This is a sensation which is likened (by different patients) to different things: to a stream of water, or cold air, to the trickling of water, to the creeping of a spider, etc &c

The sensation proceeds commonly from some distant part of the body, from one of the extremities, from a thumb or finger, or to some spot on the trunk and runs along the skin, towards the hand, occasionally it gets no farther, than the pit of the stomach, as soon as it reaches the head, or stops at the Epigastrium, or elsewhere, the patients [illegible]

him, and the paroxysm declines itself.

It is seldom that any permanent ill effect, can be noticed by a single fit, but this cannot be said of a [illegible]

Their repetition causes the memory to be enfeebled in proportion to the number of its attacks.

The features often assume by degrees a peculiar character, and too often the sufferer sinks into hopeless habitual or confirmed imbecility or insanity.

It is this tendency which renders [illegible]

Having described the [illegible] Epilepsy, the periods of life at which it is most apt to commence, its varieties, and its tendency;

and terminations, let us next
enquire what is known respecting
the seat and nature of this
melancholy complaint.
The functions affected are clearly
the functions of the brain.
Sensation, thought, and motion
regulated by the will, are the
natural functions of that organ.
The temporary obeyance of sensibility,
thought, volition, violent and
irregular action of the muscles,
which are thus withdrawn from
the empire of the will, constitute
a paroxysm of [illegible].
When the mind is affected, the most
common alteration not with in
such cases are following.
Induration of the white matter
in the brain, which [illegible]

a dull appearance.
Sometimes besides the [illegible] a general injection of the white matter; and in the majority of cases, a marked dilitation of the vessels.
In some instances, the consistance of the white matter is diminished, it is soft and flabby, but there is the same dilitation of the blood vessels.
These changes pervade the whole of the white matter, in [illegible] part of the brain.
At the same time the [illegible] matter is irregular on its surface, [illegible] or of a rosy colour, in its substance, and [illegible] in consistance.
In many cases the membranes are [illegible] to be adhered at in some [illegible] the convolutions with which

their dye in contact.
Such are the results of the experience of carefully observing in respect to the morbid anatomy of Epilepsy.
The changes last described are such as are produced by chronic inflammation of the [illegible] and its membranes;
The disease [illegible] which [illegible] to [illegible] localized in the nervous centre [illegible] or in some other part of the body.
In the one case we call the disorder centric, or idiopathic; in the other eccentric or sympathetic, we cannot always be sure, with which [illegible] of the disease we have to deal.
The distinction, (when it can be made)

is of considerable importance, in respect to the [illegible] and in respect to the management of the case.

[illegible] of Chelsea Bright is conspicuous, and any strong mental emotion is apt to produce the fit in a person who is already subject to the disease. Bodily pain, manifest and great disturbance of almost any of the principal functions of the body, may act also as exciting causes. If the attack occurs every night Dr Bright thinks it may be attributed to the congestion of sleep, if it takes place at monthly intervals in women we may often trace it to nervous irritation, in sympathy with the [illegible]

cessation of habitual discharges, and on the other hand profuse and unusual discharges, another very singular cause of Epilepsy; the sight of a person in a fit of that disease.

This has been according to medical writers noticed, over and over again.

Not only will a patient who has already suffered such attacks often fall into one, when seeing another so affected; but people will even sometimes do so, who have never before shown any symptom of Epilepsy.

In this way the disease will now and then run through a boarding school, or through a ward in a hospital.

Epilepsy is one of those complaints, concerning the probable issue of

which, the patient and still more the patients friends, are sure to make repeated and anxious inquiries. It is seldom we can pronounce with confidence, a favourable prognosis.

If we have reason to believe that the disease is centric and connected with any organic derangement of nervous centres the prognosis is bad. It is rendered worse by the coexistance of any symptom of scrofulous disease, or of the well known bodily characteristics of the scrofulous diathesis.

It is rendered worse also, when the disease has happened in the parents or among the more immediate ancestors of the patients. The prognosis is bad when the

complaint occurs in persons
who have starting forehead, and
misshapen skulls.
The prognosis is always the more
unfavourable the longer the disorder
has lasted, the oftener the fits have
been repeated, and the more
habitual they have become.
When the memory is permanently
enfeebled, or fatuity has come on,
or the disease is complicated
with any form or degree of
paralysis, the case is hopeless so
far as a perfect cure is obtained.
However unfavourable the prognosis
may be, there is nothing that
can excuse apathy or neglect
on part of the [illegible].
Though [illegible] of habitual Epilepsy,
admit admit of cure under any

treatment, yet there are few which may not be relieved by treatment.

The treatment of Epilepsy resolves itself into the measures to be adopted during the intervals between the fits and also during the fit.

In the paroxysm itself, we provide against the risk of injuries from the struggles and contortions of the patient, and if possible, to mitigate the violence, and shorten the duration of the fits. The patient should be placed in the centre of a large bed, his neckcloth and any ligature about his person should be loosened, his head should be somewhat elevated.

Some persons have advised that a piece of cork or soft wood should be placed between the teeth, to prevent him, [illegible] his tongue or breaking his teeth.

If the head be visibly congested, hot or cold wet cloths, may be applied to it with propriety, and if at the same time, the extremities be cold means of restoring warmth should be adopted. In Ophthalmic fit of Children much benefit often results from emersing them into warm water particularly if there be any coldness of the extremities.

During the intervals between the attacks we seek to prevent their recurrence and this end is to be attained when it is attainable

at all by getting rid of the predisposition to the disease on the one hand, and by protecting against its exciting causes on the other.

There are certain kinds and [illegible] of predisposition, which we cannot get rid of, such as the tendency, that is inherited, the strumous diathesis; malformation of the head, the presence of some organic lesion of the brain or spinal cord. Vicious and dissolute habits &c. It will be our duty when such are discovered to set strongly before the unhappy patient the ~~[illegible]~~ [illegible] end towards which he is hastening; the certain loss of reason to which when once the disease

has shown itself the contrariness
of his vainfull indulgence will
drive him, and to urge upon him
the necessity for a short and sudden
turn on his part if he would
expect any aid from medicine
when the patient is strong and young
but of blood, and not of a particularly
moveable temperament; when he
has a hard pulse or any degree
of fuerishness; when the disorder
has supervened upon the suspension
of some customary discharge so
that there is an obvious cause of
Plethora and when the disease is
in its early stage and the
recurrence of the fits has not
yet been established by habit,
in any or all of these circum-
stances it will often be proper

to insist upon abstemious regimen when former paroxysms have been preceded by signs of fullness of the vessels of the head by headache throwing of the temporal arteries, distension of the superficial veins, a flushed or loaded countenance you may sometimes by the timely use of the lancet or cupping [illegible] avert an attack, that was apparently impending.

On the other hand if the patient is pale and weak, or unduly susceptible, or if his malady has been fastened upon him through many repetitions of the fit, you will generally find that any form of active depletion will be injurious and learn to place hope, on measures which are calculated to invigorate the

the human frame.
The most useful of the particular remedies employed for strengthening the body is the cold shower bath, Quinine and Iron.
These tend, more [illegible] than any combination of measures to give permanent firmness and steadiness to the system.
The best test in all cases of the tonic and bracing effect of these remedies is the occurrence of a pleasant and general glow after each bath and general feeling of improvement
In books we will find a great many tonic medicines recommended for this disease.
Of the [illegible] [illegible] [illegible] [illegible] [illegible], Zinc, Copper, [illegible] [illegible]

[illegible]

The Nitrate Silver has been extensively used, but there is one very serious objection to it.

It is ~~apt~~ aptness to produce a permanent discoloration of the skin a frightful lead colour. The dose is gross in a [illegible] [illegible] adult, and the dose has sometimes been varied as high as XV gr. In large doses the drug proves purgative, and it is possible that its good effect (when it has any) may be attributed to its operation in that way.

[illegible] of [illegible] the [illegible] of your patient by administering [illegible].

The Liquor [illegible] has been thought useful but it requires to be exhibited with great caution.

I cannot pretend to weigh the merits of the long list of remedies which have been lauded, as occasions, in curing the disease, and which when they have been useful at all have operated in diminishing the predisposition to Epilepsy by strengthening the nervous system.

The most renowned substances to effect this are valerian Asafoetida. Cornwood Belladona. Iron &c.

The number might be multiplied and this array of drugs all of which have been known or supposed to accomplish a cure affords one of the strongest evidence of the intractibility of the disease.

Great benefit has been derived from a change of remedies. That is, changing from one to another.

The patient who is subject to Epilepsy

should live by rule and be temperate in all things.
His diet should be simple, nutritious, but not stimulating, he should renounce all strong drinks
He should rise early, and take regular exercise in the open air.
Keeping his head cool, and extremities warm.
He should avoid all mental excitement, all probable source of sudden anger, surprise, alarm, or deep emotion of the mind
The studant of whatever age or sort should shut his book, the man of business abandon his professional toil, and abstain from such applications as would task or strain their powers whether mental or bodily.

There is cause for suspecting that Epileptic fits sometimes depend upon a Syphilitic affection of the bones of the skull. When that suspicion arises, it will be proper to give mercury a full and fair trial.

When the disease is ascertained or believed to be eccentric, we must search diligently to find the seat of the distant irritation, in some disturbance of function and apply our remedies accordingly.

The irritation may be found in any organ of the body.

Painfull or irregular dentition is a very common source of Epilepsy.

Sometimes the attacks are attended with symptoms of disease of the Liver, slight yellowness of the skin &c.

Lowness of spirits, If the disorder depends upon stone in the bladder, the cure must be committed to the surgeon

The precautions necessary, (which every one who is subject to Epilepsy ought to observe,) and which is the business of the medical advisor to enforce, both upon the patient himself and his friends. His bed should be large & he sleeps in a room by himself care should be taken that in the winter that a proper temperature is kept up. He should not be left alone Neither will it be proper or safe for him to frequent crowd or hot rooms,.

When the circumstance admit of it, a constant attendant should accompany the patient.

The attendant should be supplied with some diffusible stimulus and means to mitigate the violence of muscular action.
During the fit the patient should be laid on a large bed, air freely admitted around him, his head raised, tight parts of dress loosened, a piece of soft wood placed between the teeth to prevent biting of the tongue, cold affusions to the head, feet wrapped in warm blankets.
During the interval attention must be paid to the general health, and every means made use of to improve it.
Change of air and diet may be resorted to.
The mineral tonics in combination

with Quinine should be employed with a liberal hand, together with the means before alluded to.
Leaters, blisters and other counter irritants have been used with advantage.
In preceding years show that the great aim to the treatment of the Epileptic, is to improve and fortify the constitution —
All remedies which which interfere with this object are necessarily injurious.
The use of violent purgation and [illegible] can [illegible] productive of mischief.

AN

Inaugural Dissertation

ON

Diabetes

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

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Of

Denton Caroline County Md.

Session of 1869 & 70

Diabetes

The Word Diabetes is derived from the greek Dia through and Baina I pass It would Consequently mean I pass through. Although this definition is extremely vague, and might be applied to affections which have for prominent Symptoms: Losses of liquid; this Word Diabetes has been Kept in our medical Works to express a disease Caracterized by a very abundant discharge of Urine. Containing always a Crystallized Saccharine Matter analogous to Starch Sugar, accompanied by an increase of appetite, an unquenchable thirst and a progressive emaciation.

Though Diabetes is not a very frequent malady, it is not very rare as we may judge by the number of authors who have made mention of it, and who, nearly all, have written according to observations which came under their notice. Celsus is the first who speaks of it designating it by its principal Symptoms; Saying that the urine passes without pain and in greater quantity than the liquid ingested. he also Says that it is accompanied with emaciation and danger. Aretaeus Speaks of it by the name of Diabetes. which has been adopted by nearly all writers, and the description he gives has only been completed by Chemical researches, made

during our Century. Galen speaks of Diabetis only in theory, and ascribes it to a weakness of the Kidneys with loss of the attractive force. Since then nearly all authors have copied the description of Aretus and the theory of Galen. The Arabs called it al dulab. which Signifies milk wheel, on account of the promptness with which the liquids are converted into urine. Avicenna was the first who discovered that the urine in Diabetis might contain some saccharine matter from the appellation Diabetis Mellitus. That vague observation seemed to have satisfied the physicians of that Epoch, when Cawley in 1778 analized accurately the urine of

patients affected with Diabetis and found the Saccharine elements. As Soon as the road was opened. Scientific men entered into it and our profession has been ornamented with the works of (Rollo (1797 & Nicholas and Guendeville (1803) Wallaston Mc Gregor. Prout &c. Diabetis is generally observed between the ages of 25 & 40. It is true we can meet with it in old and young. but it is Scarce among them, particularly under the age of 20. Nearly every one Seems to admit that the disease is less frequent among Women, yet no Statistical tables have been made to establish that fact; we only know that Women affected with this Malady

are barren. The question of hereditity has been mentioned, though it has not been settled to the Satisfaction of men who want facts. It is not Surprising that a family breathing the Same atmosphere, eating the Same food and having the Similar Constitutions, Should be affected with the Same Complaint. Authors have not agreed upon the influence that the different temperaments may have upon the production of Diabetis, nor upon the manner of living. The majority accuse a too frequent use of farinaceous preparations as a predisposing Cause, and also hot tea taken in large quantities as well as

Cider beer &c. Living in low damp unhealthy
locations, Seems to have a predisposing influ-
ence upon the formation of that Malady.
It is noted also. that that affection
is more frequent with persons who have
been debilitated by previous diseases.
hemorrhagia or losses of any kind.
those weakened by excessive intellectual or
physical labor. loss of Sleep. Venural
excesses &c. It is regarded as a fact that,
the influence of Cold and damp weather
is better Calculated to produce Diabetis
than the opposite Causes. Authors
however have not agreed even upon
that, for we have examples of patients
who were afflicted with the Malady

in temperate Climates. Each writer upon this Subject has found a Cause in each particular Case, and we find great deal of discrepancy if we wish to ascertain really what produces this disease.

Anatomical pathology shows the same divercity of opinions. Some find one or both kidneys either hypertrophied or atrophied; the tissue of the organ indurated in its normal State or friable. As to the ossification of arteries, augmentation in the Size of the nerves, formation of Calculi. I See in them nothing but Complications, and I shall say the same thing about the

pleural adherences, the congestion and degeneration of the liver and spleen, and softening of the bones. etc.
Opinions are too diversified to come to any specific Conclusion as to the Causes: and as no Sound man exposed to those Causes would be likely to be afflicted with Diabetis. I must advance the idea, that there must be an idiosyncrasy previous to the formation of the disease. The urine in this Complaint after analysis, gives us the pathognomonic Symptom: the presence of Sugar. That liquid is light coloured and transparent, of a pale Straw or greenish shade.

Its odour is peculiar. Latham gives it the smell of fresh hay. Watson our favorite author. Says that it has the faint smell of certain apples or rather of an apple chamber. Its taste is more or less sweet. and it is remarkably heavy. Dr Prout whose works are cited every where, Says that its specific gravity varies from from 1020 to 1050. and that the average is 1040. while that of healthy urine is 1015 to 1025. This malady having for its essential symptom, the presence, in the urine, of a substance which is found in no other complaint. would present no difficulty in its diagnosis, if our attention was

attracted towards Diabetes. The diseases in which thirst and the Secretion of urine are Considerably increased, present Some resemblance with the Subject of this Thesis which would mislead the Physician, if the means of distinguishing one from the other were of a difficult character; but fortunately Such is not the Case: a Small quantity of beer introduced in the urine, produces the alcoholic fermentation when that liquid Contains Sugar, and that test alone, even if the quantity of urine was not increased, would be Sufficient to prevent any error. But I have Said that it is necessary that the Physician's attention Should be directed to the urine.

The Symptoms of Diabetis in the beginning of the Complaint are so Vague that it frequently happens that the disease is overlooked. Hufeland has made a very appropriate remark, when he says: "it is very Seldom, the Physician, who first recognises Diabetis in his patient. The languor, decay of health, are very often ascribed to nervous affections or Chronic Complaints. the patients are treated as hypochondriacs and it is only at an advanced period of the disease that Spontaneously are put upon their guard, by persons Similarly affected, that they discover Sugar in their urine by tasting it.

In cases where the Physician has first ascertained the existence of Diabetes, it often happens that a previous length of time has elapsed before the urine has examined, and that useless, if not dangerous remedies had been applied against an imaginary affection. It is then necessary to follow Hufeland's advice when he Says, that the Physicians must always examine the urine of their patients, who Seem to fall away without a Sufficient Cause. That advice is Capital, because we have reason to believe, that at the beginning of the disease the urine Contains Sugar. For in Cases of relapse, when the Sugar has previously disappeared,

it returned with the other Symptoms. If other Symptoms, than those furnished by the examination of the urine, were necessary we should find them in the following Circumstances. 1st unusual thirst, dryness of the mouth, acidity of the Saliva, dental gangrene 2ond increase of appetite; though not Constant is a Symptom worthy of notice, for what Chronic affection, accompanied with general decay presents such a Symtom. 3d Dryness of the Skin is so remarkable, that even the friends of the patients take notice of it. 4th The increase in the quantity of urine, the frequent desire to expel it, particularly during the night,

is another Symptom which has its Value, though it may be misleading. 5th The Sticky deposit, resembling a white bordering spot upon the Shirt, drawers, Stockings, Pants or other Clothes &c. 6th Lack of virility, 7th weakness of Sight. 8th The peculiar faint and unpleasant odour of the breath and person, which resembles that of a room where apples have been Kept. I will Say but little about the prognosis of this affection. If the disease is left to itself it is necessarily mortal; treated by the means used Some few years back, it has not been radically Cured, but under the treatment of Mr Bouchardat or of Mr Mialhe, we may obtain Some real Cures.

Before entering upon the treatment. I may ask what is the origin and Source of this Strange Complaint. The result of Experiments Seems to Show that the fault lies in the digestive organs. Instead of healthy and nutritive Chyle. Saccharine matter is formed by the Stomach and rules the Circulation. We do not Know why it is that the Stomach Should cease to perform its accustomed Chemistry upon the food ~~the food~~ and even upon Sugar itself, as an article of food. It is proper, however, that I Should Speak about the theories brought forward by Physicians. because their treatments are based upon them. When Cullen Says that the disease

is due to an aberration of the assimilative forces, but this is a fact without throwing any light upon the question. Rollo admitted the Suroxigenation of animal humors, but what is the Cause of that Suroxigination? It is what Rollo does not teach us. He admitted that the primitive Seat of the malady was in the digestive organs. Mr Dezeimeris looked upon Diabetes as Coming from an irritation of the Kidneys, produced by Chronic gastritis. Depravation of Albumous transpiration, was admitted by Richter, Clarke and Marsh. When a notable diminution or absence of Urea was looked upon as a phenomenon proper to this malady, it was supposed that a particular action was

going on in the organism, and that urea was changed into Sugar. That opinion was strengthened when Prout demonstrated the analogy existing between Sugar and Urea. but failed after it was proved that the urine of persons affected with Diabetes, contained as much urea as that of persons in good health. Mc Gregor had already proved that Sugar was found in the Stomach, when Mr Bouchardat said in a positive manner that farinaceous food only is transformed into Sugar, and that the agent of that transformation is a principle existing in the economy of persons affected with Diabetes; that that principle has upon starch an action

Similar to that of diastase. Mr Bouchardat states also, that the acids cannot act as that principle, for he has observed that neither mineral or organic acids, can convert Starch into Sugar at the temperature required for digestion. To Strengthen his theory, he says that he has remarked that the quantity of Sugar found in the urine is always in proportion with the bread or Sweetened food taken. Thirst, says he, is explained from the fact that Starch requires Seven times its Weight of Water to be transformed into Sugar and the diabetic patients will insist upon having the proper quantity of that liquid

before their Christ can be Satisfied.
Mr Contour remarks that the principle
analogous to diastase alluded to by
Bonchardat, and which could be but
a modification of albumen, has never
been dimonstrated and in order to admit
its presence. Bourchardat is obliged to say
that the Starting point of the malady
is in the Sudden Stoppage of the acid
Secretion of the Skin. From that supposition,
it would follow that the alkaline Secre-
tion of the intestinal glands would be-
come acid, and observation has proved
to him that, Whereas the organic acids
exist in due proportion, we met with
the modification of albumen which
acts towards transforming starch into sugar.

That is what we observe, Says he, in the ripening of all fruits and Consequently, the same Coincidence must be met in diabetic people. If such was the Case, how Could we explain Diabetes in the rare Cases where the functions of the skin have not been impaired? Why is it that the disease does not disappear when the Secretions of the skin have assumed their Natural Condition under a proper treatment? Such was the State of the question, when Mr Mialhe directed his attention to it. It was generally admitted that, if Sugar, by Some means or other got into the blood, it had to be voided by the urine, or that those affected with

diabetes were the only ones who had the privilege of transforming food into Sugar, which was found in the urine. By experiments which are positive. Mr Mialhe has proved that diastase exists in the Saliva in a normal State. Bouchardat and Saudras, have found it Since in the Secretions of the pancreas. It follows from that, that any individual who inalivates farinaceous food. must convert it into Sugar; that can be proved not only by a rigorous experiment, which Consists in macerating Starch into Saliva, and in examining afterwards the results but by a very Simple one. the Chewing of an agreeable piece of bread. We will Soon find as the inalivation takes

place, a Sweet taste which shows the formation of Starch into Sugar, and what must not surprise us, is the fact that the Saccharification of farinaceous Substances, is quicker with healthy persons than with those who have Diabetes, because the latter having less Saliva, a quantity of the food escapes the action of that liquid. Magendie looks upon that fact as a Capital one.

That the Saccharification of farinaceous Substances is produced by the diastase, which exists in the normal State in the liquids Secreted by the pancreatic and Salivary glands. But why is it that it is only the Subjects affected with Diabetes who discharge, with their urine, the Sugar

absorbed in the alimentary Canal.?
according to M. Mialhe, the blood
which takes necessarily the absorbed
Substances, is alkalescent in the Normal
State. If we put together Starch, Sugar
and a liquid Strongly alkalied, the Con-
dition of the Sugar is changed as it can
be proved by the following experiments: Mix
a Certain quantity of Starch, Sugar, with
a liquid Slightly alkaline neutral or even
Slightly acid, add Some deutoxyde of
Copper, apply heat, you obtain no result,
or hardly none; add to the mixture an al-
kali the Smallest quantity of Caustic potash
for instance, and at once the liquid
takes a reddish yellow Colour which proves

that the deutoxyde has been reduced to to protoxyde of Copper. That fact can only be explained by saying that a change took place in the Saccharine substance, which, under the influence of the alkali, has obtained a deoxydizing power. If we admit the above, it is an easy matter to explain the presence of Sugar in the urine of diabetic patients and its absence in that of sound persons. With the latter the natural Kalescent condition of the blood is sufficient for the transformation of the Saccharine matter, which in that condition must have an important role in the grand act of nutrition.

Though it is not known to us in a positive manner what that role is. But with diabetic patients, the blood is not sufficiently alkaline. the transformation of the glucose into a deoxydizing matter cannot take place. the Sugar becomes a foreign body in the ~~Economy~~ System, and as such, is rejected by the renal glands. This second proposition, that is to say: the transformation of Sugar by alkaline blood, in the normal State, and its nontransformation by the insufficiently alkaline blood of the diabetics. is no less important than the precedent fact, which it completes.

Mr C Bernard Seems to have proved that the nervous perturbation has as much to do with Diabetes, as any of the theories put forward: he produced upon rabbits the above disease by wounding with a sharp instrument a certain portion of the fourth Ventricle of the brain and he states that the point of the fourth Ventricle which must be wounded, in order to produce that singular phenomenon, is very limited and corresponds to a space situated a little above the origin of the eighth pair of nerves. The same physician has also proved that Sugar is found in the liver of animals no matter what

their food may have been, and that Sugar is no longer to be found in the blood, after its passage through the lungs. The experiments of the last distinguished physician, Seems to give more room for new theories and I Sincerely hope, that future investigations will bring to light, Causes which will enable us to establish with more accuracy a treatment which will be more Successful in the management of this dangerous affection. as it is, I Shall confine myself to Dr. Mialhe's mode of treating it. I Shall, now speak rapidly upon the different treatments which have been used for Diabetes.

celius, Hufeland, Rollo and others, used Venesection moderately, Stahl bled at any Stage of the disease. Corvisart wanted Leeches, Cupping, and venesection. It is the want of proper ideas about the nature of Diabetes, which has induced the above writers to use a treatment the efficacity of which is doubtful. Antispaemodics, such as assafoetida, Camphor, Valerian have been used freely and have relieved Some Symptoms, but we cannot look upon them as Curative agents. When they were used, by Shee, Frank, Richter and Hufeland, it was with other remedies. Opium among all narcotics, has been administered more frequently and Comm-

urine has caused the doses to three fourths of a drachm, in twenty four hours Aetius. Willis and Money believed in its efficacity. It has diminished thirst and appetite. Consequently the quantity of urine; Some patients seem to have recovered their strength, but if the cases related as cured by the different writers are examined attentively, we find that they were cases of Polyuria or that the amelioration was only momentary. Among the astringents, gum Kino stands first then Catechu, tannic acid acetate of lead. They may moderate the urinary secretion, but we cannot look upon them as means of cure. If the tonics are

used. it will be on the account of the extreme debility of the patient, otherwise their administration has about the same effect, as the astringents. Iodide of iron seems to have given some satisfaction to Mr Roctan, who claims a cure from its use. We can try it in large doses say ½ drachm in 24 hours. If we should use emetics or purgatives, it ought to be when we wish to relieve the Stomach of a large quantity of food. which it is too weak to digest. or to relieve the bowels affected with costiveness. Nitric acid diluted mixed with aether, Sulphuric, hydrochloric, and phosphoric acids have been advised.

It would seem that these agents would be useless, if not dangerous, if the theory of Mr Mialhe be true. ox-gall. Creasote. Turpentine. Cold bath. Coffee. Sulphur. Calomel. and corrosives have been administered but without success. I shall not mention all the external remedies, such as friction with lard. tinct of Cantharides, bals. Peru. Animal food is preferable, for we have said that farinaceous aliments produce Sugar. Sudorifics have been used extensively by many authors, in order to bring back the suppressed perspiration. Hufeland in particular, attached such an influence to that

phenomenon, that he says, among the remote Causes, the most important is the Chronic Suppression of the Cutaneous Secretion. Alkaline preparations have been highly recommended by Willis. Fuller and Fothergill, on account of the extreme acidity of the liquids contained in the Stomach, that of the Saliva and the acid emetations with which the patients are affected. One of the best applications we can boast of, outside of internal remedies is without any doubt, the use of hot air bath. It has been recommended by Aretens, Paul of Eginus, Actius who believed that it rendered our

patients important services. Later still.
Watson gives it his sanction. I shall resume
this attempt towards writing a thesis by
mentioning successively the treatments
of Rollo. Bouchardat and Mialhe.
Treatment of Rollo for breakfast, three
pints of milk and one pint of lime
water mixed together, bread and butter.
For dinner black pudding composed of
blood and lard. Moderate use of stale
game and grass as rancid as the
stomach can bear it. For supper
same diet as for breakfast. For daily
drink ½ of a gr. in of Sulphuret of am-
monia in 4 ounces of water. The patient
will be rubbed every morning with lard

and shall wear flannel next to his skin.
he will be allowed very little exercise
and will take at bed time 20 drops
of antimonial wine the addition
of 25 drops of tincture of opium. these
last doses will be gradually increased.
A Small blister will be applied on each
renal region, and kept running.
The bowels will be kept open by the use
of a pill composed of Soap and aloes.
Rolls pretends that on the Second day
of this above treatment, the Urine begins
to assume its natural Conditions.
Treatment of Mr Bouchardat 1st for
regimen use the glutin bread composed
of glutin and one fifth of flour;

abstain from farinaceous Substances. 2ond Wear flannel, avoid Cold which might check perspiration. 3d Take every day the following potion: ℞ Carbonate of ammonia grs v

Rum ℥ ii ss

Simple Syrup ℥ v

Water ℥ iii

Mix to be taken by Spoon full in 24 hours. The Carbonate Can be gradually increased to twice, four times, or even Six times the quantity in one day. 4th At night take the following bolus:

℞ Theriaca andromachi ℥ ss

Extr Opii gr ss

It is almost useless to Say, that the two principal indications of the treatment

of Mr Mialhe, are 1st the introduction into the System of a quantity of alcali sufficient to transform the Starch Sugar into desoxygenating matter. 2nd to drive out, by reestablishing the Cutaneous Secretion, the acids which diminish the alcaline Condition of the blood.

Treatment of Mr Mialhe. 1st Farinaceous Substances must not be proscribed entirely, nevertheless for the above reasons it will be proper to diminish their quantity. 2nd The patient must begin by taking half a drachm, three times a day of Bicarbonate of Soda, after two or three days, the dose must be increased ¾ of a drachm, three a day.

and when the quantity of Carbonate has reached the dose of three or four and a half drachms, daily. It should be continued at that quantity. Plain water will be administered during meals with a little wine. Mr Mailer has also the following prescription.

℞ Calcined magnesia ℥ iii
Pure Water lb ii
Water of Orange flowers ℥ iii

Rub the magnesia with the water, and boil the mixture, stirring all the time with a Silver Spatula. Strain and add the aromatic water. Dose, table Spoonful every morning. Her administers lime water at the dose of two or three quarts daily.

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although the different alcaline Substances can be used, the best so far, are the Bicarbonate of Soda and the use of Vichy water. 3rd To reestablish the perspiration, the hot air bath must not be overlooked, for few of them will generally obtain the desired effect. The patient will wear flannel, and take good deal of exercise Contrary to Rollo's opinion. Mr Mialhe reports cases where the patients recovered under the above treatment. It is however admitted by those who witnessed them, that it was necessary to continue the use of the Soda an indefinite period, when stopped,

the Sugar would return in the urine with the other Symptoms. To continue the use of the medicine now and then. would not be very fatiguing and it is a Success to think. that we can allay the Sufferings of that dreadful malady by Such Simple means.

AN

Inaugural Dissertation

ON

BILE

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OF THE

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OF

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DOCTOR OF MEDICINE,

By

Sam[l]. T. Earle Jr,

Of

Queen Ann's Co, Md.

Session of 1869 & 70, 18

The Bile.

Few substances in the animal economy have given rise to more differences of opinion & theories regarding its formation, its function & final disposition than that of bile, and although numerous examinations have been advanced and many operations performed, with a view of ascertaining these ends, yet some of them have still baffled all such attempts, and remain clothed in mystery, to be brought to light by the rapid progress of science at some future day, and judging from the zeal with which so many of the most able men of our day are engaged in making such discoveries, I trust this day is not far distant.

The bile is a secretion as well as a part of a large glandular organ called the liver which is situated in the abdominal cavity corresponding principally in the right hypochondriac region but also extends across the epigastric into the left hypochondriac

region. It is the largest gland of the body weighing from three to four pounds and is from ten to twelve inches in its transverse, and from six to seven in its antero-posterior diameter. Its greatest thickness is at the posterior portion of the right lobe measuring about three inches. Its superior surface is convex, looks upwards & forwards and is in relation with the inferior surface of the diaphragm and to a small extent with the abdominal parietes; its inferior surface is concave looks downwards and backwards and is in relation with the stomach, duodenum, hepatic flexure of the colon, the right kidney and supra-renal capsule. The liver is held in position by five ligaments, one longitudinal, two lateral, one coronary and the ligamentum teres. On its inferior surface are five grooves or fissures, which serve to divide it into separate lobes. of the former, or fissures that divide

it; we have the longitudinal fissure of the ductus venosus, that of the gall bladder one of the vena cava, & the transverse fissure; and of the lobes in which it is divided, we have five viz. the right & left lobes, lobus caudatus lobus quadratus & lobus Spigelii, so named in accordance with their position, shape &c: The vessels connected with this organ and upon which depends its nutrition, as well as its physiological function are also five in number viz. the hepatic artery, portal vein, hepatic duct, hepatic veins & lymphatics: On the inferior surface of the right lobe is lodged a conical pear shaped membranous sack, a reservoir for the bile, the gall bladder, and it extends from the right extremity of the transverse fissure, to the anterior free margin of this organ. It is about four inches long & only one inch wide at its widest

stomach, and its fluid capacity is from eight to ten drachms. It is held in position by the peritoneum, which generally passes over its under surface, but occasionally invests it, and is joined to the liver by a kind of mesentery. The bile, which is manufactured in the liver is conveyed into the gall bladder and from it to the duodenum, by three biliary ducts, of which the hepatic allows passage of it into the cystic to the gall bladder, and these two ducts joining at an acute angle form a common duct, called the ductus communis choledochus, which directs the same fluid into the duodenum.

Notwithstanding the many assertions and different opinions by the most renowned experimental physiologists regarding the formation of bile, late researches and experiments have proved beyond a doubt that bile is made, manufactured in the liver, and that

such is the case and that its principal ingredients are not preformed in the blood before entering this organ, is shown satisfactorily by the entire extirpation of the liver in dogs, for it will then be found that not any of those substances of the bile, which are found in it, can be found in the blood. But there are certain of its constituents, which may be considered as excrementitious principles, that are to be found in the blood after such an experiment; such are Cholesterine & Biliverdin, presently to be described.

The bile which has its source in the hepatic cells of the liver, is in the words of Dr. Marshall, the exuded plasma of the portal blood, joined however by that of the hepatic arterial capillaries; but that the portal blood is essential for its formation, and that of the hepatic artery not, is shown by tying the portal vein, when the secretion will be stopped, but

On the other hand the hepatic artery be tied the secretion is not materially affected. And although in some cases of malformation, in which the portal vein opens directly into the vena cava inferior, bile is still secreted, yet it does not prove the incorrectness of the above assertion, for in such cases the umbilical vein has been found permeable, and sending blood through the liver.

The bile as it comes from the gall bladder, is a viscid and glutinous fluid, varying in color and specific gravity in different species of animals. In the ox it is of a greenish yellow, in the pig a light yellow, while in the human subject it is of a dark golden brown hue. The specific gravity of the latter is found to be 1018; its reaction can scarcely be ascertained, for it merely has a bleaching effect upon litmus. The following is an analyses of bile as given by Berzelius.

and several others. In one thousand parts of bile, they found 880 parts of water, 90.00 parts of Soda Glycocholate & Taurocholate of Soda. 13.42 parts of Biliverdin Salts. Oleates, Margarates and Stearates of Soda & Potassa, and Cholesterin. 15.24 parts of Chloride of Sodium, Phosphate of Soda. Phosphate of Lime. Phosphate of Magnesia. Carb. of Soda & Potassa, and 1.34 parts of mucus of the gall bladder.

Biliverdin is a very important constituent of the bile, being its coloring principle. it is peculiar to the liver, although some assert that it is preformed in the blood; it is formed in very small quantities; According to Frerichs it is formed in the liver, and he it is, who states that it is peculiar to this organ, and gives as a proof of this assertion, that in cases of biliary obstruction where it is reabsorbed, causes jaundice; but Dr Marshall says that it together with Cholesterin

it is generated in the blood, and that the reason why obstruction causes jaundice, is because the liver fails in this case to eliminate it from the blood. Cholesterin is a crystallizable substance resembling fat very much, being destitute of nitrogen very inflammable and soluble in alcohol and ether, but insoluble in water. It is distinguished from fatty acids by not being saponifiable by alkalies. It is found mixed with Biliverdin in considerable quantities in gall stones. The crystals of cholesterin are the form of very thin, transparent, rhomboidal plates, and this substance is not formed in the liver, but is the result of the disintegration of nervous tissue, consequently this is found in large quantities in the brain. It has also been found by Dr. Prout in considerable quantity in the spleen. It is absorbed from all these different tissues by the blood, conveyed to the liver, and

thence discharged into the duodenum as a constituent of the bile. As an evidence that Cholesterin is found in the brain is conclusively shown by Dr. A. Flint, who found one fourth more of this substance in the blood of the jugular vein returning from this organ, than in that of the carotid artery going to it; as also by showing, that both the portal vein and hepatic, lose it in their passage through the liver consequently the blood of the hepatic vein contains a very small portion. Cholesterin according to some physiologists after being poured out into the intestine, is decomposed, or transformed into some other substance, which is probably affected by the intestinal fluids, for there are no traces of it remaining in the large intestine with the effete substances, but others again say, that it, with the coloring matter and several other constituents of the bile, are found in a

slightly changed condition in these effete substances. By far the most important ingredients of the bile are the two saline substances, known as glyko cholate and tauro cholate of soda. They were discovered in ox-bile by Dr. Streeker in 1878 and are both freely soluble in alcohol and water, but insoluble in ether. The tauro cholate has the peculiar property of dissolving a certain amount of free fat when with itself, in solution with water. This may account for a certain amount of free fat found in the bile. The mode of separating these two substances from ox-bile is as follows. The bile is first evaporated to dryness by a hot air bath. Then the dry residue pulverized and treated with absolute alcohol, this filtered alcoholic solution has a yellowish appearance and contains besides the two salts in search of the coloring principle and a certain amount of the fats present in bile; the solution is then treated

with an excess of ether which causes a whitish precipitate to fall to the bottom of the test tube while a certain amount remains in suspension for some time, this is composed of the two salts, the glyko & tauro cholate of soda. These flakes unite with each other and form clear brownish yellow, oily, or resinous drops, after two or three hours this forms an almost homogeneous mass: it is sticky like "Canada Balsam", and therefore called the resinous matters of the bile, but it differs in many respects from that substance, one of which is, that it contains nitrogen. This resinous substance after having remained in solution for between twelve and twenty four hours has crystals begining to be formed in the bottom which are the glyko-cholate, and continue to be formed until all this substance becomes crystallized, these shoot upward in the

supernatant fluid in the form of white acicular

crystals, radiating from certain points of the resinous matter. The tauro-cholate however is not crystallizable, and appears in the form of circular drops of various size, clear transparent, strongly refractive, and have a dark outline, resembling very much oil globules possessing the above qualities in the same degree as do the latter, and can only be distinguished by their different chemical properties; If the alcohol now be poured off and distilled water added to the ether precipitate consisting of both the glyko- & tauro-cholate of soda, is dissolved; the two salts may then be separated from each other by the addition of the acetate of lead, which decomposes the glyko-cholate of soda and precipitates the glyko-cholate of lead; the precipitate then separated from the fluid by filtration is again decomposed on the addition of carb. soda, which

results in the formation of the original glycocholate of soda. The solution which then remains after the abstraction of the glycocholate, may be treated with the subacetate of lead which precipitates the tauro-cholate of lead, and this in turn may be decomposed by the carbonate of soda, with the same chemical reaction as above mentioned, resulting in the formation of the original tauro-cholate of soda. These two substances then may be distinguished by their reaction with the salts of lead in solution, for while the glycocholate is precipitable by the acetate of lead as well as the subacetate, the tauro-cholate is only precipitated by the subacetate of lead. These salts examined separately are found to be composed of the following substances; called respectively in each, glycocholic and tauro cholic acid. These latter when boiled with potassa as Dalton recommends, and according to Marshall with hydrochloric

and other acids, are decomposed each into two substances, first a non-nitrogenous acid, cholalic acid found in both, and secondly a nitrogenous substance, known in one case as glycocoll or glycine from the glycho-cholic acid, and in the other, or that from tauro-cholic acid, as taurin. But these are not to be regarded as natural ingredients of the bile and are only produced by long boiling with potassa and according to some with the acids, so that they do not throw any real light upon the constitution of the bile; tauro-cholic acid differs from glyco-cholic, in containing two equivalents of sulphur; cholalic acid is further changed into cholodinic acid, and this again into a resinoid substance, soluble in ether, but insoluble in alcohol called dyslysin. These decompositions are due to an anatomical loss of water. According to Dr. Marcet, a similar decomposition appears to occur in the living body, for in the small

intestine. The acids spoken of as being set at liberty by boiling the principle salts of bile with potassa, or with acids are here set free by hydrochloric and other acids of the chyme; at the commencement of the ileum they are partly thus decomposed, while in the lower part they are wholly so, and in the large intestines not any thing remains of them but cholesterine, and a very minute particle of taurine. The glycocol and taurocholic acids are supposed to be formed entirely in the liver, since there are no remains of them to be found in the blood, even after the entire extirpation of this organ; or in any other part of the healthy body. They are therefore supposed to be produced by the transformation of some of the constituents of the liver, which take place in the hepatic cells. It is supposed by some that glycocoll and taurine arise from the decomposition of albuminoid substances and cholalic

acid from the fats of the blood, but these substances do not hold in connection with them these salts, but are transformed into them in the hepatic cells. These two salts were found by Strecker, their discoverer, to exist in ox-bile only, although he supposed on examining the bile of different species of animals and finding two substances soluble in alcohol and water and insoluble in either that they were all identical, and that consequently both the salts of bile, the glyko- and tauro-cholate were present, and were crystallizable, nitrogenous and sulphurous, the same as in ox-bile, but possessed these properties in different proportions in various specimens; he however found one exception to this supposed established fact, which was that of pig's bile, in which he found hyocholate of soda. But his slight comparison of the different kinds of bile, were insufficient proofs for the results arrived at and

asserted by him, for upon closer examination, it was found that although different species of bile resembled each other in the particulars he had pointed out, in regard to their solubility and insolubility, yet they differed in many others which proves the incoherency of his argument for their similarity. In dog's bile, for instance, there are two remains of an ether precipitate, one crystallizable and the other not, and differ from ox bile in regard to the salts found in it, only in two respects, namely, that the crystallizable one in dogs bile becomes so much sooner than the corresponding one in the ox bile, for the latter does not generally take this character before twelve or twenty four hours, or even forty-eight, have elapsed; while that in the former specimen on the other hand commences to do so freely, in five or six hours: the second point of difference, and which is most important is, that while glyko-cholate in ox bile is

precipitated by the acetate of lead; it is not affected in the least in the case of the dogs bile by this salt of lead, but if a solution be made from the other precipitate and treated with the subacetate of lead in excess, in this case, a copious precipitate falls, composed of fat, & the crystallizable and non-crystallizable salts of bile, which of course have to be reduced to the soda salts by the above process, for they are here connected with lead as in the above cases. In both the biliary salts of dogs bile are precipitable by the subacetate, and neither by the acetate of lead. They may be called instead of glyko- and tauro-cholate of soda, the crystalline and resinoid biliary salts. In pig's bile we have even a greater degree of dissimilarity, inasmuch as there is no crystalline matter in the form corresponding to the salt above mentioned, as found in ox-bile, and in a watery solution of another precipitate,

there is a deposit in the bottom of the test tube on the addition of both the acetate and subacetate of lead differing from the glyko and tauro-cholate of ox-bile therefore in these two respects, that neither are crystalline and are both precipitated by either the salts of lead. In the human bile we find the same departure from the ordinary changes which takes place in the salts of ox bile, here also there is an absence of the crystalline salt, for it is found that in an ether precipitate of an alcoholic solution, no signs of the formation of crystals make their appearance, even though the solution be allowed to stand for three weeks, and if this precipitate be redissolved in water, as in the case of pigs bile, a deposit is formed on the addition of either one of the two salts of lead.

Different kinds of bile, vary also in other respects, for example their specific gravity, depth and tinge of color, and the quantity of fat they contain &c. The alcoholic

reaction of bile or bile pigments does not precipitate the addition of distilled water which however is contrary to the effect produced by the same when tried with that of the human subject or that of pigs or dogs, for in these cases a dense precipitate is formed, owing to the quantities of salts they hold in solution. These variations however are of minor importance to those which show what variations there are in the presence of the crystalline and resinous substances.

The amount of bile secreted during the day, was found by Bidder & Schmidt to vary in different animals, being most in herbivorous and least in carnivorous, and although man bears a resemblance in his digestive powers to that of both of these classes, yet more he resembles the latter, and consequently corresponds more nearly with them in the amount of bile secreted.

It is shown by these experimenters' observations, made by

means of internal fistulae in the fundus of the gall bladder each period for drawing off the fluid lasting about five hours, and were made at different lengths of time from the last meal, due allowances being made for temporary fluctuations. The amount for twenty four hours in a cat was found to be 102 gr of fresh fluid and 5.712 gr. of solid residue after water evaporation, and in a rabbit for the same time, 95.9 gr. of the fresh fluid and 17.290 gr. of the solid residue. Thus showing quite a considerable difference between the two classes; now if the amount secreted by a man be compared with the above results of the experiment on the carnivorous animal, or any other of this class, it will be found that in an adult man weighing 140 lbs. according to some two and a half pounds, and if this were as much as four pounds are secreted daily.

"Whether the bile is an intermittent, or constant secretion is a matter of no little importance; for if it only takes place during digestion, it would go far to prove that it is an digestive fluid, but as has been shown by experiment, it is secreted to a certain amount at all times, even after the animals experimented on had been made to fast eight and twelve days, for it was then discovered in their intestine, by answering to Pettenkofers test, although it is most abundant during digestion, but this may be owing to an increase in the portal circulation, yet as Dr. Marshall has very well said, "the general adaptation of means to ends in the animal economy, suggests the conclusion, that this secretion is most needed at this time". Nevertheless, it is a constant secretion, like the respiration, and as a natural conclusion from this,

it is supposed not to be exclusively a digestive fluid, although as will be shown, it has an important part in that function.

It is stated above that the secretion of bile increases at the time of digestion, and is greatest at that time, than any other; it may not be uninteresting to know at what period after eating this increase is greatest and at what time the increase commences, but this time has been variously estimated by different writers on the subject. Bidder and Schmidt say, as the result of their experiments made by tying the common bile-duct, and making an external biliary fistula into the fundus of the gall-bladder, that it only commences two and a half hours after taking food, and does not reach its maximum until the end of twelve or fifteen hours. But these results do not agree with the instructions Prof. Miles has given us as to the flow of bile through the ducts, on account of their experiments being the result of a

fistula opening into the gall-bladder, for he has suggested to us the idea, that the bile does not necessarily pass into the gall-bladder before entering the duodenum but that a part of it does so principally during the intervals of digestion, owing to a reaction of the walls of the common bile duct, which will not at all times allow all the bile that is secreted by the liver to pass directly into the duodenum and hence it is blocked up in the duct, and as a consequence regurgitates into the gall-bladder, which by means of its muscular fibres contracts and expells its contents, when an increased supply is needed in the intestines, or when it becomes over distended, and it, together with the increased amount coming from the liver during digestion, overcomes the pressure in the walls of the common bile duct and is thus discharged into the duodenum, but there may be some regurgitation

is continuous, even during this time, so that the gall bladder is probably never empty, so that we thus see the gall bladder merely acts as a receptacle for the superfluous bile during digestion, and as what might be termed a store house for it during the intervals of digestion, or that according to this, the experiments of the first mentioned authors only show in reality the time when the secretion is on its decline during digestion. Dalton also states that their experiment was not correct on account of the fistula opening into the gall bladder, and as will be seen by his following experiment, avoids their mistake, and we may therefore take his conclusion to be correct which is as follows. Ten after experiments upon dogs having an external duodenal fistula, five and a half inches below the pylorous of the stomach, and two and a half below the opening of the common bile duct into the duodenum, by which the absolute amount

discharged into the intestine at different periods from the time digestion first commences, could be ascertained, he found that by drawing off the fluids from this canal, and arriving at the amount of bile in each quantity thus withdrawn; the increase in secretion and discharge into the duodenum began immediately after eating, and reached its maximum at the end of an hour, after which time it gradually declined, but does not vary much more than 15 gr. of solid material in an hour. To this result Marshall seems to agree. In regard to the final disappearance and disposition of the bile, it will be remembered that it has been before stated, that Biliverdin as it reaches the duodenum is changed from a yellowish to a green, and then to a dark brown hue, which with Cholesterin and (Dyslysin which is the result of a double decomposition of cholalic acid), are discharged with

undigested food, but not all of the bilverdin is thus gotten rid of, for a part is changed and reabsorbed, and according to some all of it is reabsorbed. The biliary salts are also reabsorbed, probably to be eliminated by some other communities, as glycocoll is probably thrown off by the kidneys in the form of urea, for when it is administered as food, more urea is excreted by these organs; or probably after their reabsorption into the system, they fulfill some other function. A minute amount of taurin however is supposed to be eliminated with a part of the coloring matter in the feces.

As may have been seen in some forgoing remarks, there have been several incidents cited where the presence of bile in different parts of the intestine have been shown by a peculiar test called after its originator "Gettenkofers", and one may have seen from

the assistance there afforded, that it is of much importance, especially as some such test is necessary in making physiological investigations on an animal fluid that has given rise to so many discussions, as the urine under consideration, and because it is the only one to be relied on for this purpose.

The only means formerly depended upon was that of the change of color taking place in the exposure of pure bile, or a fluid containing it, to an oxidizing substance, for instance when bile in an open vessel, the air acting on it will change it to a greenish tinge, which gradually becomes deeper with the length of time it is thus exposed, and the quantity of bile it contained. Nitric acid when added to a similar solution produces the same change, in color, in a precipitate which it causes, which is due also to its oxidizing influence. Tincture of iodine in small

quantities has the same effect. It is by this change of color that bile has been often discovered in different fluids of the body in cases affected with jaundice. But this is a very inefficient test in any thing like accurate investigations, as it is only the effect of an oxidizing agent on the coloring matter, and does not indicate the presence of either of the biliary salts, for if the residue of dried dogs bile be precipitated by ether from an alcoholic solution, redissolved in water and decolorized by animal charcoal, the green color will not appear even on the addition of nitric acid, although a precipitate may be formed on the addition of the subacetate of lead, and the fluid give other evidences of the presence of bile, especially of the crystallizable and resinoid salts; so there should be as there is, a test to overcome such difficulties, so as to show the presence

of bile in the absence of the coloring matter.
Pettenkofer's Test is by far the best in vogue, so
thought by some, I believe; it consists in adding
cane sugar to a solution containing bile, and then
add sulphuric acid, when successively a red, lake,
or purple color will be found. A solution of sugar
may be made and kept for the purpose, in the
proportion of one part of sugar, to four of water, one
drop of this may be added to the suspected fluid
and then add the sulph-acid, a dense precipitate
is formed, which however may be redissolved by
continuing to add the acid, this should be
continued until the solution acquires a syrupy
consistency and an opalescent look, a red color then
makes its appearance, which increases until the whole
fluid acquires a bright cherry red, it then gradually
changes to a lake, and subsequently assumes a purple

color. Various circumstances however modify these results for if the biliary substance be present in a large quantity, these different characteristic colors are soon discoverable, and become very distinct, but if on the other hand they be present only in a minute quantity, the red color may not become apparent for seven or eight minutes, and the purple, not for twenty or twenty-five minutes, and will then be very faint. Again if foreign matters be present in the solution, they may be acted on by the sulphuric acid, become discolored and interfear with the appearance of the colors in search of, hence it is necessary that the fluid to be tested for the presence of bile, be first dried, dissolved in alcohol, precipitated by ether, and this precipitate dissolved in water; in this way all foreign matters likely to give rise to any difficulty are gotten rid of. Furthermore the sugar itself is liable to be acted

a, iron and discolored by the sulphuric acid, especially when the former is in excess, in this case the reaction on the sugar produces a yellow tint, which becomes changed into a dark brown, but there is never present the characteristic red or purple color, but they may be rendered obscure by this yellow dingy appearance, but even this difficulty may be overcome by being particular in two respects, first, to add only a small amount of the sugar solution, and secondly to add the acid slowly, for the red color peculiar to bile, if present, will become perceptible before the yellow produced by the action of the acid on the sugar; and also, because if the biliary substance be present only in a small quantity, you must be ready to discern the first indications of the red color, which will be distinct and give a very reasonable evidence of the presence of bile.

It is important to observe that this latter color is not sufficient evidence for the presence of bile in a fluid, but it is the further change in it the lake and purple hue, which are to be relied on. Therefore these latter are the only characteristic colors of this test. It is well to know that either or both of the biliary salts respond to this test, nor is it dependent in any way upon the presence of the coloring matter, for if the two biliary salts be extracted by the above process and the watery solution decolored by animal charcoal, the solution will still have the same reaction with sugar and sulph. acid, although no green tinge may be produced on the addition of nitric acid; and if the two salts be separated, their respective solutions still produce the ordinary changes in this test. Various objections however have been urged against it, as has been stated to be uncertain and variable.

Robin & Verdeil have asserted that this reaction does not belong solely to bile but that other substances produce the same effect and may therefore give rise to mistakes. Some fatty substances and volatile oils, as olein, oleic acid, oil of terpentine and caraway have been declared to produce the same characteristic colors when treated by this means. No other substance however likely to be met with in the blood or intestinal fluids will produce like effects, for it has been found that not even the fat taken from the thoracic duct, and treated with this test, will give rise to any color that may be mistaken for those formed by the salts of bile in a similar position, and when the volatile oils, terpentine and caraway, are acted upon by sulph-acid and sugar, a red color is produced and this is changed into a brown blackish hue, but gives no evidence of the lake and purple characters spoken of above.

in attempting to ascertain what is the precise function of the bile, it will be necessary to find what part, if any it takes in digestion. That it does, and that its action in this process is important, we will proceed to prove; but it does not depend upon the presence of any albuminoid substance, like ptyaline in saliva, pepsine in the gastric juice, or pancreatine in the pancreatic juice. Its importance may be seen by its highly complex composition, & from its principle ingredients being directly secreted by the liver, and not performed in the blood; secondly, by its being most abundantly secreted during digestion; and lastly, by the high point at which it is discharged into the intestine, which seems to indicate some important part to be taken by it in the process of digestion. But as will have been seen, a portion of the solid materials are removed from the body, and may therefore be regarded to a small

or bile, a excrementitious fluid. But to proceed with its secretory function; First it serves certain mechanical uses, for instance, it excites the mucous membrane of the intestine, and thereby increases its secretion, and it stimulates either directly, or through the nerves, the contractile fibres of the mucous membrane and its villi; as well as those of the muscular coat of the intestine, and thereby increases absorption in the first case, and peristaltic action in the second, for I believe it is a generally acknowledged fact that a scanty supply, produces constipation, although after the supply has been cut off for a time, diarrhoea may and is very likely to come on, but this, in the words of Prof. Miles "is caused from the decomposition of feces which will be bound to take place in the intestine, in the absence of bile, thereby exciting irritation, and an excess of the same is thought to produce diarrhoea; also

the administration of a bile, has, I think, been found to act as an apperient; hence a proper quantity may be inferred to assist in maintaining a healthy action in these parts. It further acts as an anti-putrescent, for in the case of its absence from the intestine, a decomposition of its effete contents takes place, which gives rise to flatulency and a very fetid smell with the feces and breath. It also has the effect of arresting fermenting processes out side of the body, and hence may be inferred to have the same effect internally. Although the theories of the above actions, are generally acceded to, by Physiologists, yet its more important functions, as its direct effect on digestion, and chemical actions, have given rise to many vastly dissimilar views and numerous theories, warmly sustained by plausible experiments. But I think, its principle actions are now generally agreed upon. Experiments performed out side of the body

by digesting various articles of food with it at a temperature of 100 Fah. shows that its action is but feeble in converting starch into sugar, only slowly changes cane sugar into lactic acid, and leaves albuminoid and gelatinous substances unaltered; a fatty emulsion with this fluid, is imperfect, and soon separates itself, leaving the fat unchanged. It is said to affect and even arrest the action of saliva, and the gastric juice out side of the body, and the latter is also thought to take place within, but this effect is not produced directly the bolus passes the opening of the common bile duct into the intestine, for it only stops this action as it comes in contact with it, and it takes some little time for the bolus to become thoroughly impregnated with the bile, so that it has passed some distance down the intestine before the action of the gastric juice is entirely suspended; it is supposed to leave the

effect by throwing down the active principle of gastric juice, pepsine; some however doubt if this effect within the intestines. In external biliary fistula, although amylaceous, albuminoid and gelatinoid substances have been found to be aided in their digestion by bile, yet in regard to the fatty materials of food, it certainly seems to assist in, or determine their absorption; which as given rise to numerous opinions, as to its mode of thus acting, as will be seen from the following. Thus it has been thought by some that it digests this variety of food by having saponaceous properties, and thus directly dissolves them, but it cannot thus act for swans only have this power by possessing more or less free alkali which assists in dissolving additional fat, but the only substance probably that gives this alkaline reaction to bile, is the Phosphate of Soda, which is present only in very minute quantities. By others it is thought merely to be accessory to the pancreatic juice in performing this

function. but Dr. Amd. Fendwick goes still farther and asserts that it is the chief of these two agents in its action on this part of digestion, whatever may be the action of the pancreatic juice; he says this conclusion is arrived at, from the experiments of Bidder and Schmidt, who after tying the pancreatic duct, found several hours after feeding the animal with food containing fat, that the lacteals were distended with chyle, the same as in ordinary digestion. He further states as a proof of this conclusion, and as the result of the same authors experiments, that a dog fed on an ascertained amount of fat, was found on weighing the feces to have absorbed 11.013 for each kilogramme of its weight, another fed in the same way, with a biliary fistula, where all access of bile to the intestine was cut off, was found by a similar examination of the effete materials to have absorbed only 1.56 grammes of its weight; but, I think, it is generally acknowledged now

that the pancreatic juice emulsionizes it and is then rendered absorbable by the bile, &c. It has been [illegible] by external experiments that an emulsion of fat will pass but very slowly out of a membranous sack unless mixed with bile, when it will readily do so; it has also been seen when all access of bile is cut off from the intestine by an external fistula that the fatty particles of food will be passed out with the feces, the animal loses weight rapidly, its appetite becomes voracious from nature attempting to compensate for the loss of food caused by the indigestion of fat, its hair falls out, and the animal soon dies.

In [illegible] the experiments of Bidder & Schmidt above mentioned as cited by Dr. Fenwick to prove the chief agency of bile in the digestion of fats, yet it has been shown on the other hand by experiments made on the pancreatic juice, that the former is only accessory to the latter in preparing and digesting this article of food. The way in which it is supposed

to assist in this process is by its exosmodic action, for it has been seen that animal membranes moistened with it, or with an alkaline solution, are rendered more permeable to fatty substances. And the late experiments of Wistinghausen, have shown that oil will rise many times higher in a capillary tube moistened with a solution of the glyko- and tauro-cholate of soda, than in a similar one wet with water; he also states that fats pass through animal membranes more rapidly when moistened with with bile. Thus, I think, we have shown that, although bile may in part be an excrementitious fluid, yet undouptedly has very important secretory functions, and is essential to life by its assistance in digestion, although is not strictly speaking a digestive fluid, yet by promoting absorption of fats, is an important element in this process, in which action it and the pancreatic juice would seem to be dependent one on the other.

Sam. T. Earle jr.

AN

Inaugural Dissertation

ON

Cholera Infantum

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

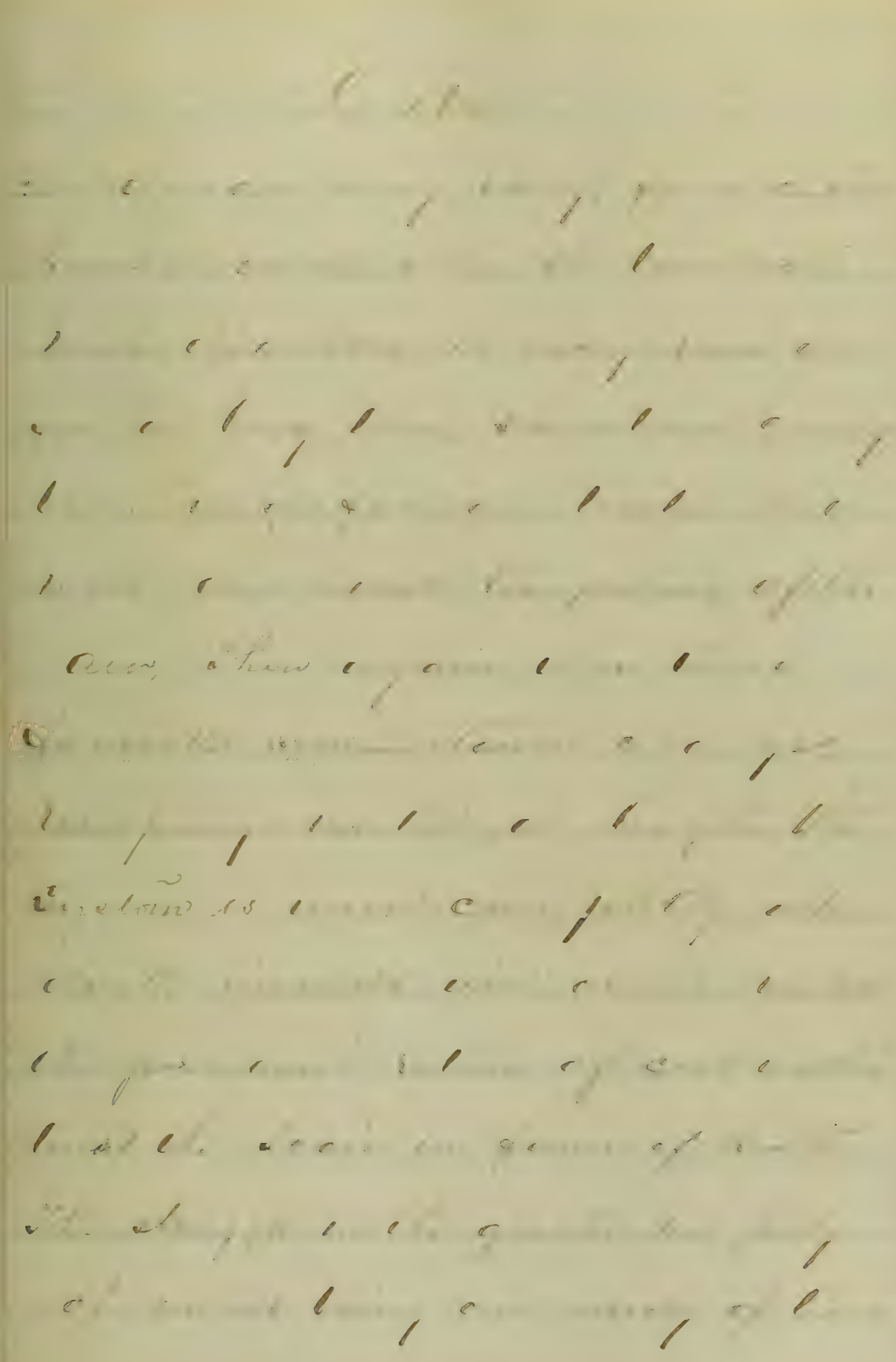
FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Charles A. Wright
Of
Maryland

Session of 1869 and 70



Diagnosis.

An accurate diagnosis is arrived at with comparatively little trouble, it may however be confounded with Tubercular Meningitis although this is distinguished by the stools and the

Cerebral Symptoms It may likewise as it no doubt frequently is confounded with simple or the inflamatory forms of Diarrhoea. But the period at which the disease generally commences and the vomiting and purging which always accompany it are sufficient to differenciate and a correct diagnosis arrived at

Prognosis

This for the most part is somewhat difficult If for Instance the child be one of wealthy parentage so proper hygenic remedies may be had recourse to. the probability for a safe issue is general. realized

as the child will then be taken into the Country where an abundance of fresh air will be given it, and if necessary receiving proper medication under these circumstances. when the pulse becomes slow, and vomiting ceases, and the stools return to their normal Physiological color and circulation the Physician may then say with almost absolute certainty, that the child will get well, But on the contrary when these cases happen among the poor class of people, who live in crowded and ill ventilated houses then the prognosis is unfavorable

and it is among this classes of people that the ravages of cholera Infantum are chiefly manifested.

Treatment

The first indication in the treatment of Cholera Infantum after having examined into the history of the case is obviously to remove the cause. For while this continues to act the most judicious efforts on the part of the practitioner would be either quite nugatory or but partially successful. The child should therefore be removed as soon as possible into the Country St Howard says from his experience

the happiest changes in the disease speedily follows this change of atmosphere, attention should also be directed with diet and clothing of the child, frequently indeed under this treatment alone, recoveries are effected, should a removal of the child be impracticable it should then be carried out into the any part of the town or city many times and let remain for as long a time as possible, the room in which the child is kept should be well ventilated, clean and dry.

Medical Treatment

As this disease very frequently happens during the period of dentition it is important that the physician examine the mouth, as we very frequently have inflamation caused from the pressure of the teeth against the gums, in such cases if the sores of much inflation the physician may lance the gums. The best food for the infant is mothers milk. and if she be diseased a healthy wet nurse should be procured. as the child should by no means weaned during the existance of the disease, The best substitute for Maternal milk is fresh cows milk

diluted with water, the farinaceous
liquids prepared from Barley,
Rice, Sago, Tapioca wheat bread
and crackers may also be used
but care should be taken that the
substances mentioned be fresh and
free from mustiness. When there is
much fever, Solution of Gum Arabic
Infusion of lemon leaves, or other
mucilaginous fluids may be
substituted In advanced stages
when the system is much enfeebled
animal foods such as chicken or
mutton broth may be given, but in
no too great quantities, for fear
of irritating the stomach.

In cases where the disease can be traced to improper alimentation then give a mild laxative as ℥ss Syrup of Rhubarb, afterwards give an astringent the bath may be used once or twice a day. In mild cases attention to diet is all that is requisite But when the child persists in vomiting give some expectorants Viz Ipecac and calomel, in order the throw off the offending or irritating mass, you may continue the Calomel in 1/20 gr doses. until the stool show signs of mercury, Sometimes the irritability of the stomach is so great that you are forced to discontinue the

use of all diet with the exception of Liquor Calcis and milk. This is though easily relieved by Lemon Juice or

℞ Acetas Plumbi v grs
Dil acetic Acidum v guttas Dose ʒi every
Alba Schm ʒi half hour untill
Alp Dist ʒii relieved.

or if this does not answer you may give Acetas Plumbi in grs iii doses and apply Sinapisms Aromatic Salp Acid an excellent remedy. If the diarrhoea persists give some of the astringents

℞ Crabs. eye. ʒip
Gum Arabic
Schoar. aa ʒi
Aro. Spts Galls ℥p.

or

℞ Best Galls ℥p
Pul Cinnamon ʒij
" Ginger ℥p
Best French Brandy ℥vi
Let the ingredients stand 24 hours

℞ Creta prep ʒi
Dro Tinc opium xvi gutta
Tinc Rhottary ʒij
Creasote gutta ij
Alp Cinnamon ℥p
Alp Dist ℥vij
Dose ʒi every 3 hours.

℞ Creta Prep ʒij
Pul. Kino vj grs
Gum acacia aa ʒi
White Sugar
Dro Tinc opii xii gutta
Pro. nut Megs vj grs
feat. Pro. xii Give one every 3 or 4 hours with water

The Ammonia Citrate Bismuth is an most excellent preperation. Nitras Argenti in doses 1/12 gr. in water found very efficient, when the discharge is thin and bowels flattulent give Turpentine If the stools show evidence of bile give Chl. Hyg mite Gm must support the powers of life by tonics and stimulants Liq. nitrate Ferri best preperation in chronic diarrhoea, in doses from 2 to 4 gutta ter dei - the best stimulant is old french Brandy. when the digestive apparatus seems totally inopperative Dr. Howard recommends xv. gutta of wine of Repsin. as the best thing to be done, If for instance after having

after having conformed with the rules laid down for your treatment, and the infant still on the decline, apparently drawing nearer, and nearer the grave do not become discouraged, but cling tenaciously to your little patient for oftentimes when death seems almost to be the victor, your little patient by degrees will grow better, become more animated, and in a few days restore to the tender bosom of an anxious mother, the object of her affections

AN

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By

H. Stafford Bowie

Of

Maryland

Session of 1869-70

than female and is most apt to occur in feeble children.

Symtoms

It generally commences with diarrhoea and vomiting on the second day, the vomiting consists of the contents of the stomach with mucus and bile, it may be very frequent or only two or three times a day, it is not so frequent after two or three days. The diarrhoea is the most important symtom, the stools are fœtulent at first with normal color and of the consistence of mush, then of a yellow color thin and watery, then of a dark green color resembling whop-spinach

bleared and pupils become con-
tracted. A state of coma results
from which there is no relief,
and after a few hours death ends
the scene.

Anatomical characters
It was not until 1829 that the true
pathological character of this dis-
ease was discovered and published
by Dr. Horner of Philadelphia — it
being a development and relaxa-
tion of the follicles of the intes-
tines if the disease lasts for any
length of time, if only existing
for a time, only development
is noticed, the stomach is not
often affected pathologically,

the follicles of the small intestines are seldom affected, but the lesions are much more extensive and common in the large. The kidneys, spleen, liver and mesenteric glands are seldom affected. The child on this affection should not be allowed to remain too long upon its back, as it will give rise to a hypostatic condition of the lung. In the third stage of this disease we have softening of the brain, and hence the cause of its great fatality. American writers very generally divide cholera infantum into three stages, the first characterized

by turgescence of the intestinal follicles without inflammation but perhaps attended by more or less softening of the mucus membrane. In the second stage intestinal inflammation is present. The mucus membrane is vascular in patches and streaks, sometimes thickened, and the solitary glands and patches of Peyer are inflammed and ulcerated. In the third stage the brain is affected. The cranial sinuses, veins and capillaries of the brain are congested, and there is serous effusion upon the surface of the brain or in the ventricles, as a general thing the brain is always more or less soft.

Diagnosis

The disease is diagnosticated by the symptoms, and especially by the frequency and character of the stools. The vomiting, thirst, rapid sinking and emaciation, serve to distinguish cholera infantum from other diarrhoeal affections, also the season at which it occurs being most frequent in July and August. It may be confounded with tuberculous meningitis, but in the latter the bowels are torpid and the cerebral symptoms predominate coming on much earlier. It may be diagnosed from typhoid fever in as much as there is no gurg-

ling in the right iliac fossa
no rose colored rash or sibilant
rales, the latter being always pre-
sent in typhoid fever.

Prognosis

This is one of the diseases in which
physicians should be very guarded
in giving a prognosis, a favorable
one should seldom be expressed with-
out qualification, even if the urg-
ent symptoms are relieved there is
yet danger of the occurrence of
intestinal inflammation, which in
hot weather is formidable and often
fatal. If the stools become more
consistent and less frequent, with-
out the occurrence of cerebral

symptoms, we may confidently express the opinion that there is no present danger. The conditions of life should be also taken into consideration, it is unfavorable with the poor, and in bad hygienic conditions favorable when the opposite is the case.

Treatment

The treatment of cholera infantum must be prophylactic, hygienic and medicinal. For the former the child should be kept at the breast until after the second summer if possible, its clothing in the hot months should be a light gauze flannel shirt with

a muslin pillowcase and a mak-
tress is the proper bed for it. For
hygienic treatment, fresh air
is all important, bathing is use-
ful, and when there is restlessness
without any seeming cause, a
little water should be given as fre-
quently it is thirsty especially
during dentition. The frequency
and rating character of the stools
in cholera infantum and the
consequent rapid sinking of the
infant, call for prompt measures
for the arrest of the disease. If
there is any irritating substance
in the stomach or intestines
which acts as an exciting cause

of the vomiting or diarrhoea or at least aggravates it, it is proper to commence treatment by the use of some warmth, for this purpose a few grains of epecac may be given with benefit till the burden is thrown off. Much more frequently the efforts of the bowels are not successful in carrying off their contents, and the stomach is at the same time so irritable as not easily to retain medicine. Then calomel in small doses is the great remedy, it is not offensive to the taste; it can be retained when no other medicine can be; creasote, lime-water with milk also act well —

vomiting. During the first twenty-
four hours when there is great
prostration and the vomiting
and purging is incessant Acetas
Plumbi in two or three grain doses
with a suitable proportion of opium
is very good. If there is no indiges-
tible substance in the intestines,
purgants should not be used, as
they would then do more harm
than good. If the disease has con-
tinued several hours, it is probable
that any irritating substance which
might of have been present at first,
has been passed from the bowels,
and no purgation is required.
Treatment designed to diminish

the frequency of the evacuations and improve their character should be commenced at the earliest moment. Every hour that children infantum continues unchecked reduces the strength of the infant and diminishes the chance of recovery. Our main reliance must be on opium in some form. If Landanum be used, it may be given in one drop doses every two or three hours to a child one year old, its effects being watched. There is danger in this disease of the sudden supervention of stupor, unwanting even to coma and ending fatally. In these cases the stools

are generally suddenly checked and the opium may in a great measure be instrumental in producing this result. If the evacuations are partially checked and there are signs of stupor, the opiate should either be omitted or given less frequently. Astringents and often alkalies should be employed as adjuvants of the opiates. The chief danger is from the frequent watery evacuations, both these remedies aid materially in restraining them. When the affection is attended with active symptoms, as high fever, full pulse &c. leeches should be applied, also cold to the

AN

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ON

Concussion of the Brain

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OF THE

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DOCTOR OF MEDICINE,

By

James F. McShane

Of

Baltimore Maryland

Session of 1869&70

To my Preceptor

Nicholas Luke Dashiell, M.D.

This Thesis

Is respectfully and affectionately

Inscribed

As a testimony of high respect for his professional talents and esteem for his private worth

By his

Grateful Pupil

James F. McShane

Concussion of the Brain

Concussion of the brain, signifies a sudden interruption of the functions of the brain, caused by great violence being offered to the head. This violence may be either direct or indirect.

The head as a mass is made up of structures of various mechanical qualities; some are soft, some elastic, and some hard with the least degree of elasticity, and in receiving the concussion the various structures may receive the effects of the blow independent of each other.

We also find a difference in the injury of the same structure, arising from the difference in the way in which any given momentum striking

upon the part is compounded. Thus in two blows, the momentum of each may be the same, although the velocity and quantity of matter may differ, if these powers are reciprocal to each other. Then the effects of the impetus may vary considerably.

A velocity may be given to any instrument, a common hammer for instance, that may make the momentum equal to a heavy mass moving slowly. Upon these principles it is that great varieties occur from the impetus with which blows or inflicted upon the head. If the mass be great and slowly moved the impetus acts in the way that allows it to be diffused over the whole head; on the other hand if the mass be small and the velocity great, it must happen that the bone will be fractured and driven

in at the part struck. Thus it is that great violence is done without fracturing the bone, and is the cause of severe concussion; and in severe injuries of this kind where there is evidence of so much internal violence having been produced, there is no mark of injury upon the scalp.

The direction in which the blow is given alters altogether the effects that are produced upon the brain. To explain this it must be remembered that the skull makes, in all its sections, some sort of curve; and also that every impetus impinged on one part will transmitted through it, in the direction in which the blow is given. Consequently the brain receives an universal shaking and compression.

If every blow were given to the tangent upon

any part of the curves of the cranium, the effects would be transmitted to the base of the brain. But as this is not the manner in which injuries always occur, there are great differences in the effects of concussion on the sensorial powers.

If the blow is given in such a direction that it would transmit the impulse to the base of the cranium, the cerebral symptoms will be severe; but if the direction of it transmits the impulse across the brain, then they may be very slight. It is this which has caused some little controversy among surgeons, whether blows upon the forehead or on the occiput are the most dangerous. It is not the part stricken, but the direction in which the blow is given, that gives rise to the difference.

If a blow be made upon the vertex of the skull, whether by the patient falling upon this part, or by the impetus of a moving body, the force may be expended upon and lost in the elastic quality of the bones by which a vibration is produced, causing thus a serious concussion of the brain.

Symptoms. — The symptoms attending concussion of the brain are generally in proportion to the degree of violence which the brain itself has sustained. Concussion may happen in very different degrees. Some varieties exist between the slight stunning which is the sudden effect of an inconsiderable blow, and the complete disorganization, which at the instant of the injury annihilates at once all power of motion and causes instant death.

Immediately an injury has been inflicted upon the head, if all severe, the patient is rendered insensible. He lies insensible, motionless and his pulse is scarcely perceptible; his face becomes pale and the surface of the body cool; the breathing, although feeble, is regular and easily perceived; irregular contraction and dilatation of the pupils; relaxation of the sphincter muscles in common with the entire voluntary muscular system, so that the contents of the bladder and intestines escape involuntarily. If he continuing for a few minutes, hours, or even days, he gradually evinces signs of consciousness. The heart first resumes its accustomed action, the pulse undergoes development gradually and the skin becomes warm. At this period vomiting generally ensues, which arouses the action of the heart. Under the excitement of vomiting, the heart drives blood

to the brain and thus freely supplies stimulus to the general controlling organs, causing the patient to rally rapidly.

In some cases the patient staggers, but after supporting himself for an instant against some near object, recovers and continues his employment without any further annoyance; in extreme cases the patient is picked up apparently dead, with relaxed muscles, surface pale, glassy eyes, pulse almost imperceptible and respiration feeble and irregular.

The deathlike appearance in cases of very severe concussion becomes more and more confirmed, gradual cessation of the respiratory functions and the pulse imperceptibly flutters away, without any sign of consciousness from the moment of injury. This result is dependent upon the particles of neurine, of which the brain consists, being put in a state of vibration, an effect which interrupts for a time or forever the

functions of that organ. When the state of insensibility lasts, the patient is not affected by ordinary stimuli; the eyes may be opened in a moderate light, and he will not apparently be aware of the presence of any one; if roused and called loudly by his name he gives evidence that he is aware of the circumstances; after a time he moves his limbs as if in an uneasy sleep, vomits and recovers gradually; remaining however, giddy and confused for some hours afterward, if spoken to he will answer incoherently, evidently neither understanding their import, nor sufficiently able to collect his thoughts to give a particular answer.

Some cases are succeeded by a peculiar state of insensibility, which may last some days, the patient will lie as if in a tranquil sleep, the pulse is regular, but upon the slightest movement it will rise to an

hundred & hundred and twenty; the carotids beat violently; when spoken to he answers questions, but immediately relapses into unconsciousness. Some when in this state resemble somnambulists; they may get out of bed, walk around, shave & urinate, still they are insensible to what passes around.

We cannot be too much upon our guard to prevent the sequela, the most important of which is Paresis.

In cases of injury to the Skull, the surgeon, so much more frequently observes the effect of injury to the brain as a whole, than merely to the membranes primarily or the hemispherical ganglion secondarily, that he is more in danger of overlooking such symptoms than the physician, whose attention is drawn to the disease in its idiopathic form. When inflammation follows concussion of the brain, it is more frequently of the substance and lining

membrane of the ventricles, than of the cortical substance, so the symptoms are decided and unequivocal from the beginning. Sometimes in some of those cases in which the patient staggers merely, upon receiving a blow, and the effect of the blow passes over quickly and the patient is considered out of danger; in a few days inflammation supervenes in an insidious manner so that it is overlooked by the friends, the services of the medical man not being, as they suppose, any longer required. The origin of many cases of insanity may thus be traced, which might have been prevented if the first symptoms had received the attention which they deserved.

Prognosis — The degree of danger in any case may be estimated by the extent to

which the spinal and ganglionic systems appear to be implicated. If therefore the pulse and respiration continue feeble for many hours afterward, if the eyelids do not move when irritated and the legs are not drawn up when the soles of the feet are tickled the prognosis will be serious. But when the injury is less considerable, its functions are restored gradually in a more or less perfect manner. Imbecility, loss of memory, and a marked change in the character are sometimes the irreparable consequences. In some instances the patient's memory only remains weakened and can recollect only such incidents as have recently attracted his attention.

There is a constant tendency to inflammation and to extravagant actions after drink or any other excitement. In very violent cases death is the unavoidable

result, such is the extent of the disorder that all means are incapable of restoring the functions of that organ. — A case is recorded of a lunatic who was so fortunate as to recover his reason in consequence of an accident that caused concussion of the brain.

Pathology. — When concussion has proved fatal, the brain has been found more or less injured and often highly congested, exhibiting a dusky hue. In some cases there have been found fissures in the substance of the brain, in others, extravasation of blood in numerous and concentrated spots. In certain cases the brain has apparently shrunk from the excessive shaking or vibrations to which it has been subjected, no longer filling the cavity of the skull.

In some cases of concussion where the brain has been fissured, the commotion among its particles, so annihilated its functions, that the hearts action had instantly ceased, and no blood had been driven to the lacerated brain to be extravasated into its substance.

In some cases of nearly instantaneous death from concussion of the brain, upon examination appeared in every respect healthy, the lesions in its substance, not being perceptible to the eye.

On the contrary in cases of perfect recovery after concussion, where the patient had lived for a considerable period in the full enjoyment of his faculties and had died from some disease totally foreign to the former injury that had caused the concussion, extensive lesions had been found in the brain and

traces of large and blended extravasations of blood, which covered the hemispheres as well as traces of blood-clots in the cerebral substance.

The irritable condition of the brain in which the patient is for a while after concussion of limited duration, with the impairment of memory, or of some one of the special senses, or even of partial paralysis of the limbs, would be proof of cerebral injury.

Although its symptoms are usually transient, we may consider it an interstitial laceration or contusion of the substance of the brain.

Treatment — After an accident, causing concussion of the brain, has happened it is difficult for the surgeon to resist the impulsiveness of

friends, who are always clamorous for active interference, believing that unless prompt means are resorted to, the patient must die. It is then, that the surgeon requires all his presence of mind to resist their solicitations and advice and should steadily pursue the non-interference plan of treatment.

Many different modes of treatment have been practised, but the method now recommended is to place the patient in a horizontal position, with his head a little lower than his body, so that the brain may have gravitation to assist in its supply of blood. Stimulating frictions used upon the extremities of the patient may be assisted in warm blankets and bottles containing hot water placed around his body, to re-establish the circulation; beyond this nothing should be done.

In a case of simple of concussion the best practice consists in doing as little as possible. The indiscriminate use of stimuli on one hand and of bloodletting on the other are to be avoided. In past years bloodletting was resorted to in all cases of concussion of the brain and the amount of injury done by this uniuersal routine practice, in the majority of cases, was irreparable.

In a case of concussion, the heart scarcely pulsates, and in consequence so little blood is thrown to the surface of the body that it is pale and cold. In the brain a condition similar to this exists, where scarcely any blood circulates from want of its natural stimulus, its functions are suspended temporarily. Thus if bloodletting is resorted to and were it possible to draw away much

blood from the brain, the nervous functions would become permanently extinct.

Thanks to modern surgery, that percieves now, what should long since been recognized, that nature in her endeavors to harbor the blood, tries to put a safeguard against the rashness of surgeons, by retaining in the inner recesses of the body, this precious, vitalizing fluid, when it cannot be easily despoiled. It is to this change in practice, that we are indebted for the recovery of cases of concussion, when comparatively speaking a few years since, the result of such cases was generally fatal.

Stimulation should be desisted from as long as possible and stimulants should only be administered with almost cautious sparing hand and only when it becomes compulsory. The degree and duration of the shock depending upon

the amount of injury which the brain receives, nature, the most skilful physician, accepts this concussion as a preventive of further mischief.

How are we to ascertain that the brain has not sustained extensive bruising or laceration with rupture of blood-vessels; and that this extreme depression, with consecutive control of the heart's action, is not especially indicated to prevent hemorrhage within the brain and rapid death from compression induced by extravasated blood? This is known, that after the brain has sustained severe injuries, when, through officious meddling and the free use of stimuli, the symptoms of concussion disappear, violent reaction takes place and internal hemorrhage or violent inflammation soon shows itself; and for the gratification of seeing the patient revive

rapidly, we have the extreme mortification of seeing him as rapidly destroyed.

Stimulants should only be resorted to, when the patient is in danger of sinking from depression of the circulation, but this occurs very rarely. The pulse should be carefully watched and as long as it does not lose its strength under concussion although the patient remain in an insensible condition for hours or even days the plan to be pursued is that of non-interference.

No after trouble will be avoided, if nature be allowed to pursue its own course unmolested. When from long continued depression, stimuli are used to prevent threatening dissolution, their effects should be closely watched and as soon as reaction becomes apparent

with the pulse increasing, they should immediately be stopped. Because when the depression is excessively great, the reaction will in time be correspondingly excessive and more so if stimuli have been freely used.

After recovery from the state of insensibility perfect quiet should be enjoined and excitement of every kind carefully avoided. The head should be kept cool, the diet simple and any tendency to constipation corrected. With this exception nothing should be done, unless called for by excessive reaction, accompanied with symptoms of congestion or inflammation of the brain.

Hysteria.

Respectfully Submitted by

William J. C. Waller

January 1st 1870

Hysteria

The word Hysteria. is derived from a Greek word, which means. Uterus. It received. the name of Hysteria, because it was reputed to have its seat in the Uterus, But writers. of a later date. have shown that Hysteria, arises from other causes than derangement of the Uterus. The Ancients. were of the opinion that the disease under consideration; arose from some derangement. or Lesion of the Uterus. on which They, bestowed very many gratuitus powers.

While the Uterus is often the seat of this derangement of the nervous system, yet it is found to arise from other functional derangements than the Uterus, for it is found in the male as well as the female. But it is stated by most all writers to be a disease very rarely found in the male, Therefore as I have noticed we always find the disease Hysteria classified among diseases that are peculiar to females being more often in the female than male,

The name Hysteria, as commonly used embraces a multiplicity of morbid phenomena, It is used to denote an abnormal condition of the nervous System and the mind which enters largely, as a morbid element into a great variety of affections. The Hysterical condition as regards the mind, involves a morbid Susceptibility to emotions and a defective power of the will to restrain their manifestations.

Writers upon this disease
say. That a person is said
to be Hysterical, whether
male, or female, who
weeps or laughs irrepressibly
on inadequate occasions.
Thus Patients sometimes
weep violently without
experiencing mental anguish,
and laugh immoderately
without enjoyment. We have
therefore this immoderate
laughing, and weeping,
as one of the best diagnostic
signs of Hysteria in
the male as well as the female,

Hysteria is seen to assume under a variety of forms, for convenience of description Dr Watson says, they may all be reduced to two forms. The first of these forms has a general resemblance to an Epileptic fit. The trunk & limbs of the Patient are agitated with strong convulsive movements, she struggles violently. like a person contending; rises into a sitting posture, & then throws herself back again; forcibly retracts & extends her legs. While her body is twisted from side to side & so

powerful are these muscular contractions that it often is all that three or four persons can do to restrain a small girl, & prevent her from injuring herself or others. The head is generally thrown backwards & the throat projects, the face is flushed the eyelids are closed & tremulous, the nostrils distended. the jaws often firmly shut. but there is no distortion of the countenance; the chalks are at rest? unless when, as often happens: the Patient is uttering screams or exclamations.

If the hands are left at
liberty the Patient will often
strike her breast repeatedly
& forcibly, or carry her fingers
to her throat as if to remove
some oppression there, or she
will sometimes tear her hair
or rend her clothes, or attempt
to bite those about her.
With all this her breathing is
deep laboring, irregular, with
palpitation of the heart.
After a short time this
violent agitation is calmed.
But the Patient lies panting
& trembling, starting at the slightest

noise or the gentlest; Touch some times they remain motionless during the remission with a fixed eye till all at once the convulsive movements are renewed. This alteration from spasm to quiet; will go on for some time: varing in different cases: & the whole attack frequently terminating in an expulsion of tears or laughter. The second form according to Dr Watson. We find the principle marks of disturbance are referable to the viscera. The patient experiences a sense of uneasiness in

some part of the abdomen
more often in the left flank
a ball appears to roll about,
& to rise first to the situa-
tion of the stomach, & then
to the throat, when the patient
feels a choaking sensation.
The act of swallowing is frequ-
ently repeated; the abdomen
becomes distended with wind,
loud rumblings & undulat-
ions take place. There is
much palpitation of the heart
The patient is sad & sorrowful
& prone to shed tears with
a general low & depressed state.

After the paroxysm these Patients commonly pass a large quantity of limpid pale Urine, nothing almost like water; & this is sometimes expelled during the fit. Patients in this state are not completely unconscious: they know of what is said & done. Sensibility to pain is somewhat blunted. but not absolutely: pinching; or pricking the skin may be done without flinching. But strong impressions such as are produced by the application of a heated hammer. or the prolonged cold douche

occasion suffering. Boerhaave
The method of the celebrated
Boerhaave relates an occurrence
of a very remarkable kind as
having taken place at the
Harlaem Hospital. A girl
was brought in to the ward
in convulsions of a periodical
kind; the convulsion was repeated
the next day. which affected
several. who beheld her in the
same manner & in a few days
most all were affected that were
in the same ward; both boys
or girls. This became so general as
to excite great alarm; any

means which experience had found useful hitherto in such affections were tried in vain. They at length sent for Boerhaave himself. He directed that a variety of iron instruments should be heated red hot in a furnace in the ward & be in readiness at the time when convulsions were wanted to make their appearance; & ordered that the first one that was seized with the disease should be burnt on the arm with a heated iron to the bone. This so alarmed the subject of the affection: that in an instant a stop was put to the complaint.

Dr Dewees says the disease was excited by the operation of terror upon the sensorium commune & arrested by a terror of a more violent kind? Through the same medium. No one can for a moment hesitate to acknowledge the influence of the mind upon the nervous system, passions & emotions may not only prove the exciting; but they may also serve as the remote cause of Hysteria. The experience of almost every body can furnish illustrations of this fact & medical records abound with examples of them.

Symptoms of Hysteria are forms of paroxysms which occur at irregular periods. In some the paroxysms are the chief signs of the disease; the health being good; & sometimes almost perfect in the intervals. In others there is scarcely ever complete exemption from the paroxysms. When a hysterical condition or Hysteria exists; or the disease has once been called into activity; a great variety of causes may excite a paroxysm of greater or less force, such as palpitation of the heart. copious flow of urine

of a simple character; cold feet & hands. difficult breathing, alternate laughing & crying. All of these symptoms may exist without being followed by a fit, but when they are present it is always apprehended, especially, when crying or laughing be among the number, Anatomical Characters of Hysteria, Nothing has been discovered upon Post mortem examination calculated to throw any light upon the disease. according to the opinion of the different Authors,

Cause of Hysteria. A great variety of causes may contribute to the development of the affection: among the more frequent being anaemia nutrition of mind & body, mental anxiety or grief & the frustration incident to various diseases.

Pathology of Hysteria involves a functional morbid condition affecting the nervous system. especially the mental faculty An important element of the affection is disorder & weakness of the will; the affection is not purely mental But proceeds from disorder of the b...

Diagnosis. The affection with which Hysterical paraxysms are most liable to be confounded is Epilepsy. The distinctions made by Dr Marshall Hall is affirmed to be this:— That in Hysteria. much as the Larynx may be affected. it is never closed; in epilepsy it is closed. In Hysteria the Patient is always conscious. In epilepsy is entirely lost. Diagnosis. without complication is devoid of danger.

Treatment. Requires remedies that will tone the the nervous system. Valerian. Assafoetida. Dr Shew says Tincture of Valerian is highly valuable in doses from 20 to 40 grains.

AN

Inaugural Dissertation.

ON

Report of six cases drawn up while Clinical assistant to the Balto. Infirmary.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

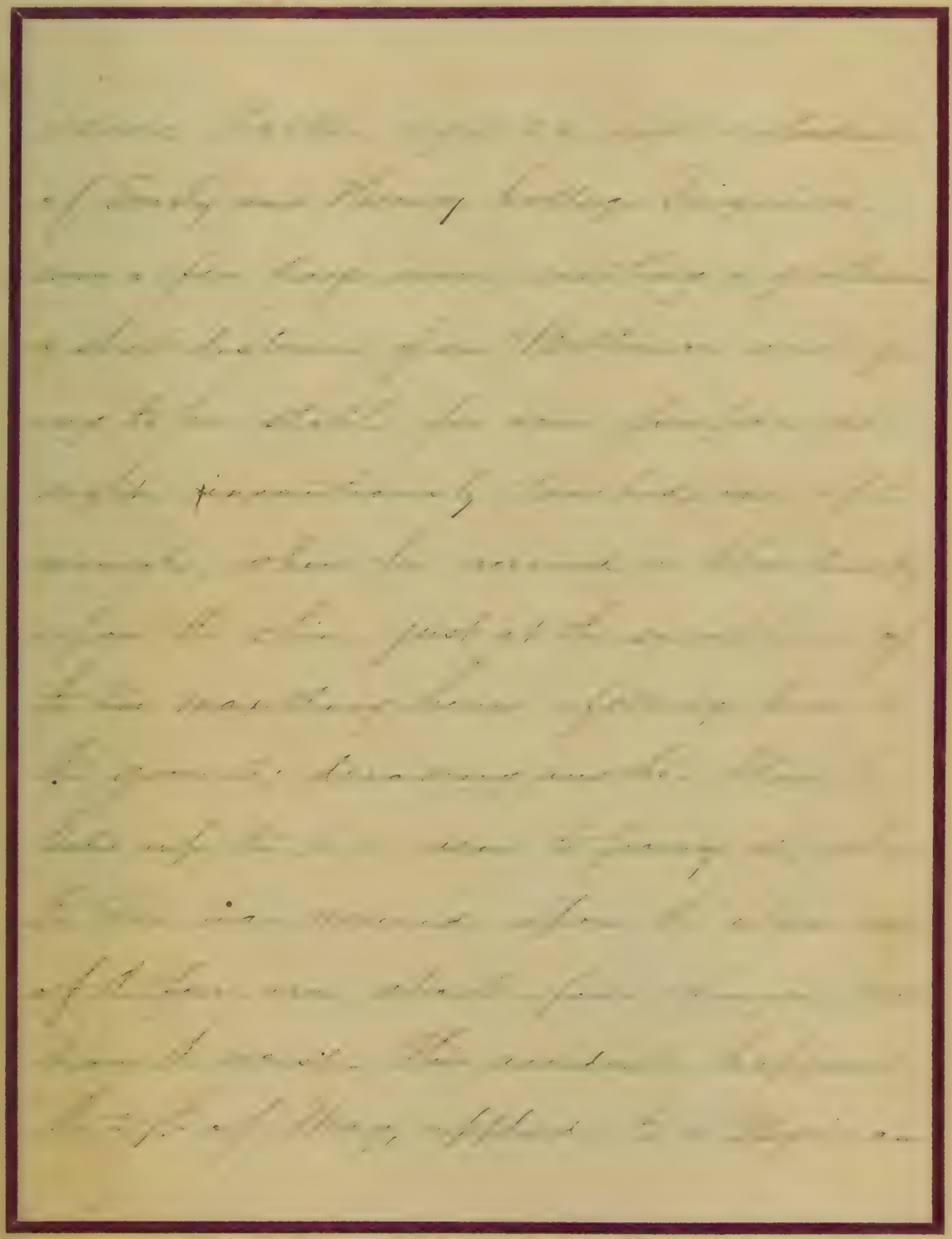
By

Samuel Hall Anderson

Of

Montgomery Co. Maryland.

Session of 1869-70



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Examined [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

inability to mastication anything. [illegible]

[illegible] to be applied to [illegible] to support more in a matter of form [illegible] than of necessity. Patient improving rapidly needing no further attention.

Remarks - This case is interesting for the manner in which the fracture of the ulna was detected having until seen by Prof. Chisolm previously escaped the close examination of two physicians; no crepitus could be ascertained; consequently the case teaches us we cannot always base an opinion upon its absence into whether or not there is a fracture, as the simple expedient practiced, that revealed a fracture in the case mentioned) —

Case 2.

Joseph

Speaks of Chief Adam

[illegible] lotion [illegible] [illegible]

[illegible] following plaster [illegible]

[illegible] Ext. Belladonna [illegible]

Ungt. Hydrarg. ℥ß

[illegible] Found the patient not much better [illegible]

[illegible] continued, and at night [illegible]

[illegible] of Epsom salt was given, [illegible]

[illegible] continued [illegible]

[illegible] [illegible]

[illegible] had a free operation

in the morning, was free from pain [illegible]

[illegible] lotion still continued

abscess detected in the upper [illegible]

portion of scrotum, opened and quite [illegible]

quantity of pure discharge [illegible]

Case 3rd

Lithotomy

[illegible]

James Hagen aged [illegible]

[illegible]

Infirmary June 19th 1869, suffering [illegible]

[illegible] of stone in the bladder [illegible]

[illegible] and at the present time [illegible]

[illegible] so far, as can be ascertained [illegible]

had the symptoms since [illegible]

to be something of [illegible]

[illegible] suffered [illegible]

When first seen he presented all the

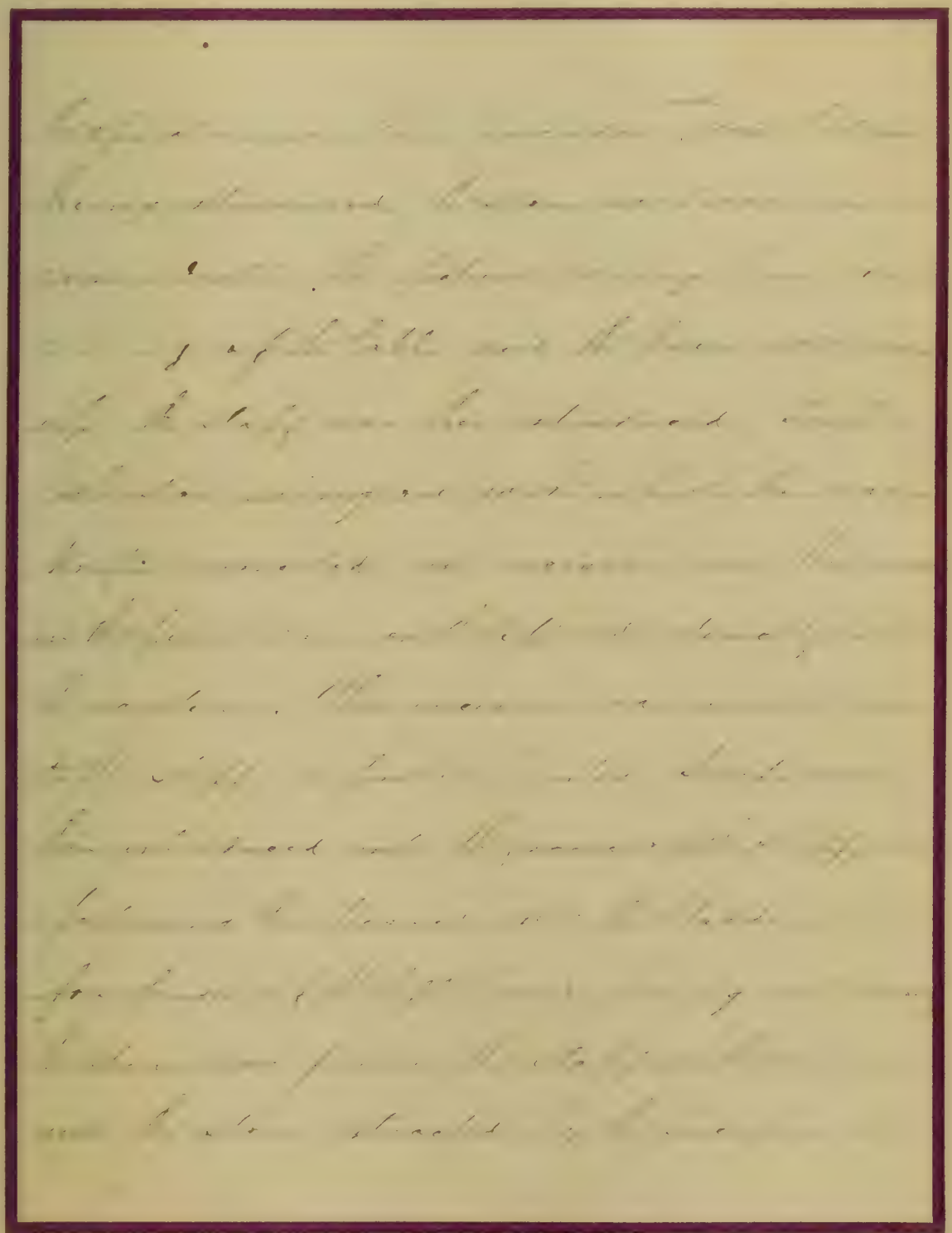
[illegible] signs of stone [illegible]

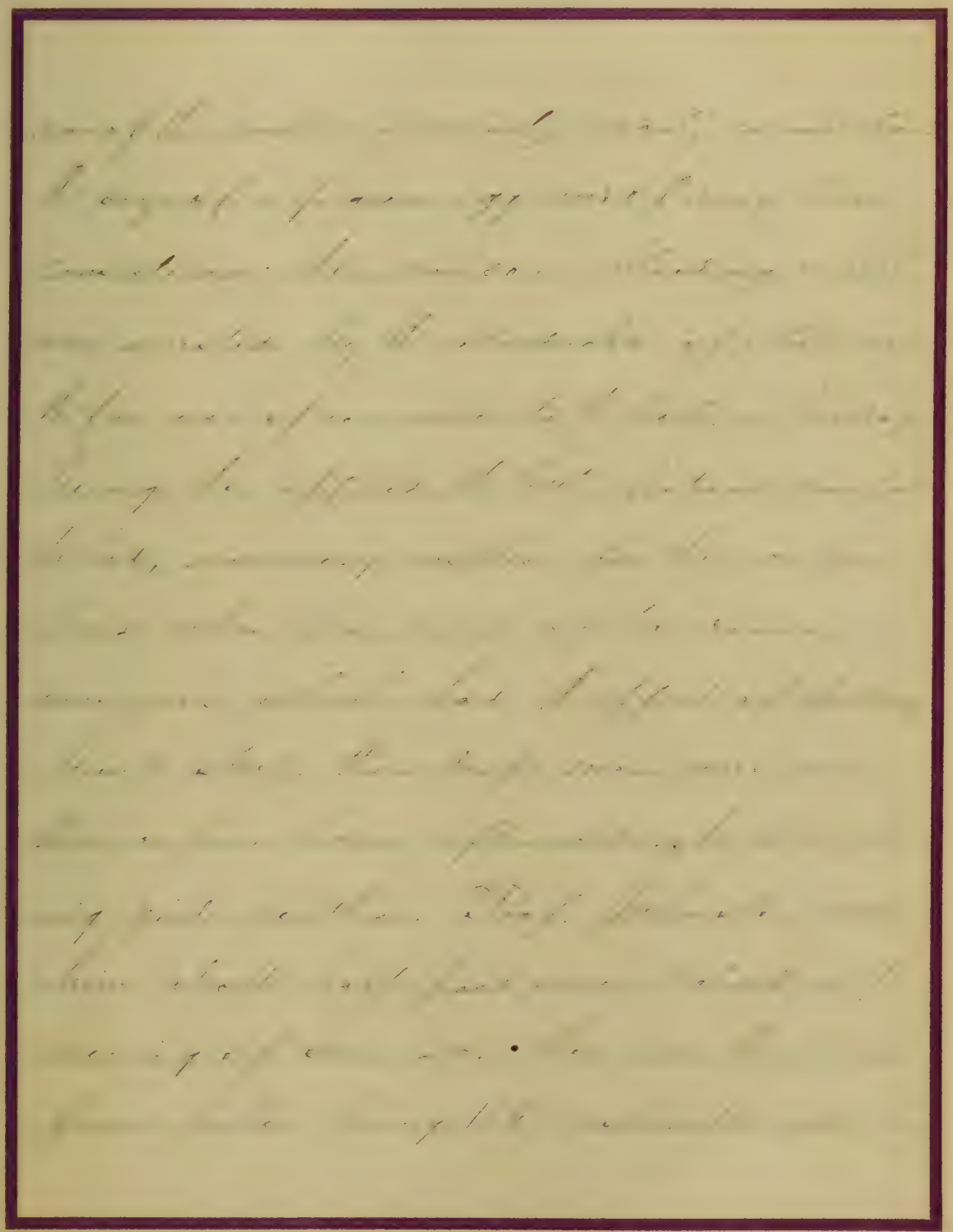
[illegible] from the [illegible] of the [illegible]

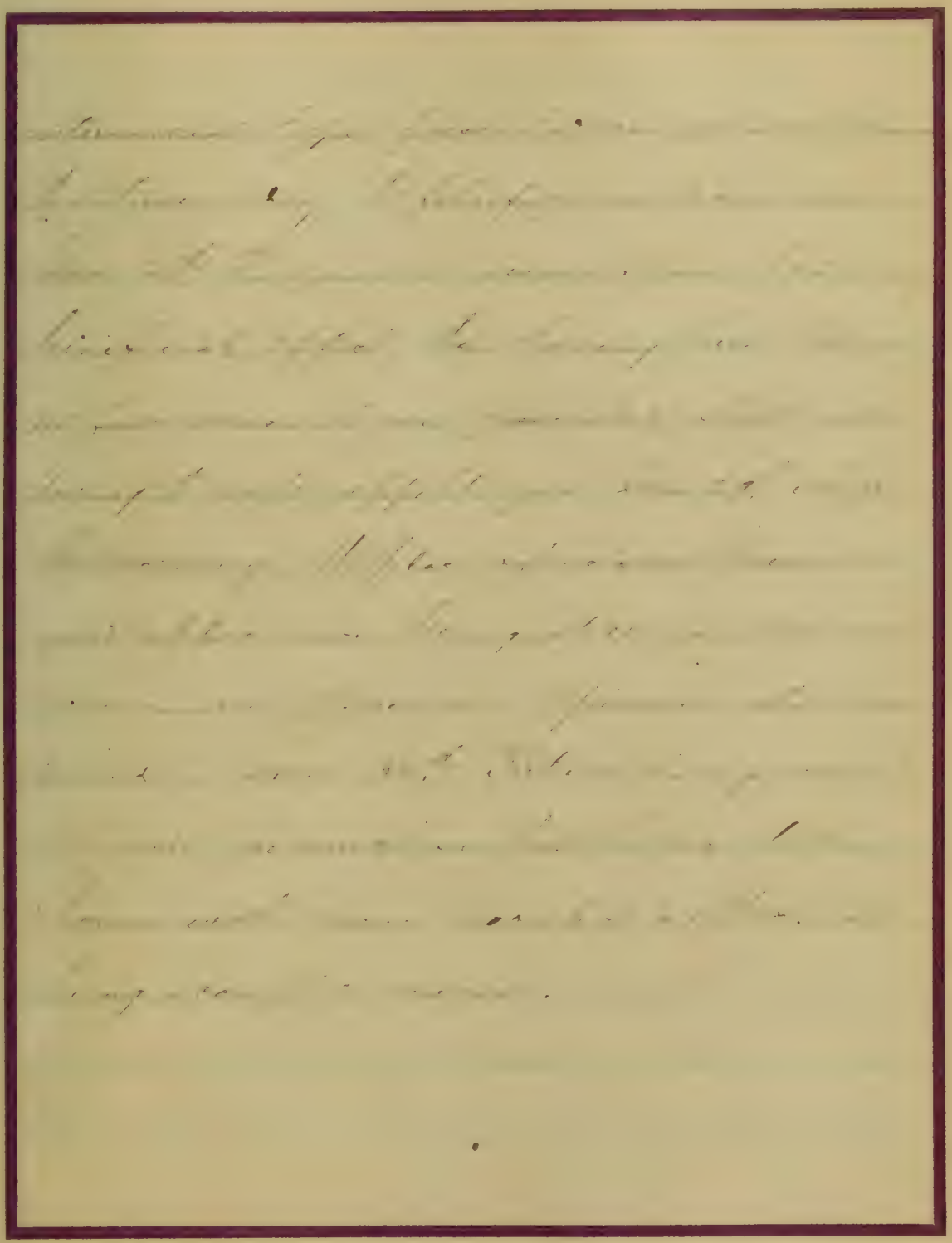
the neck of the bladder during which [illegible]

[illegible] irresistible [illegible]

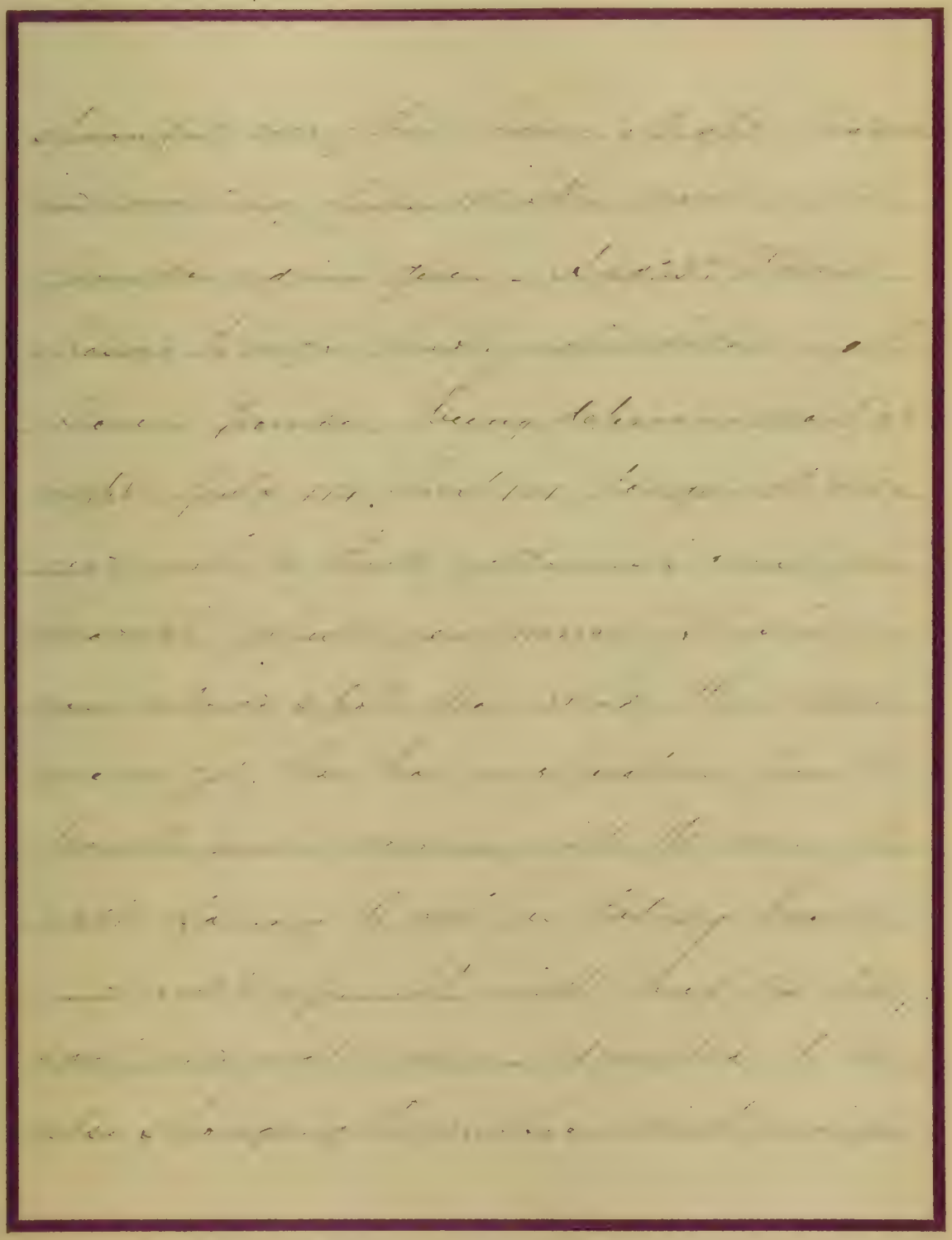
[illegible] of the [illegible]

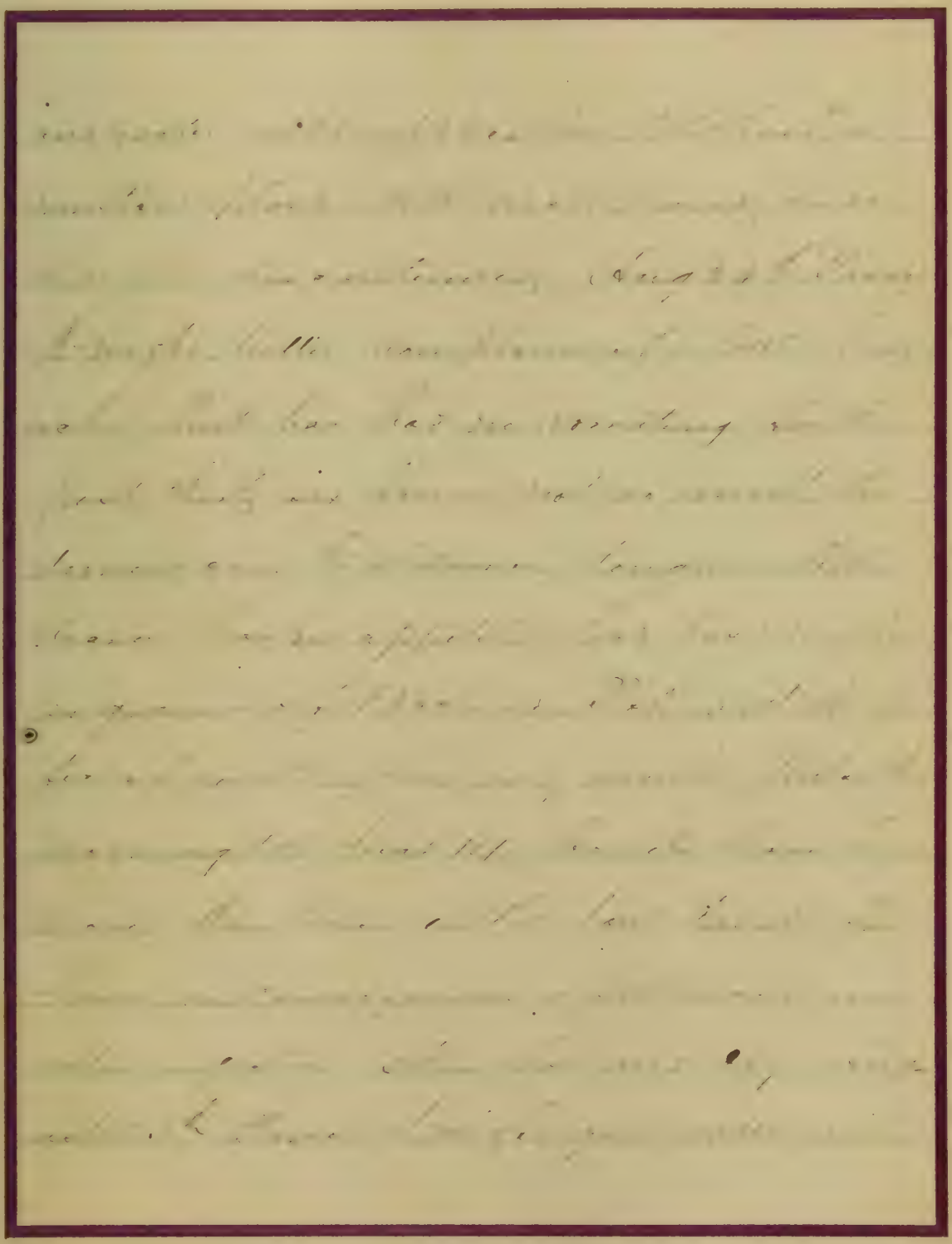


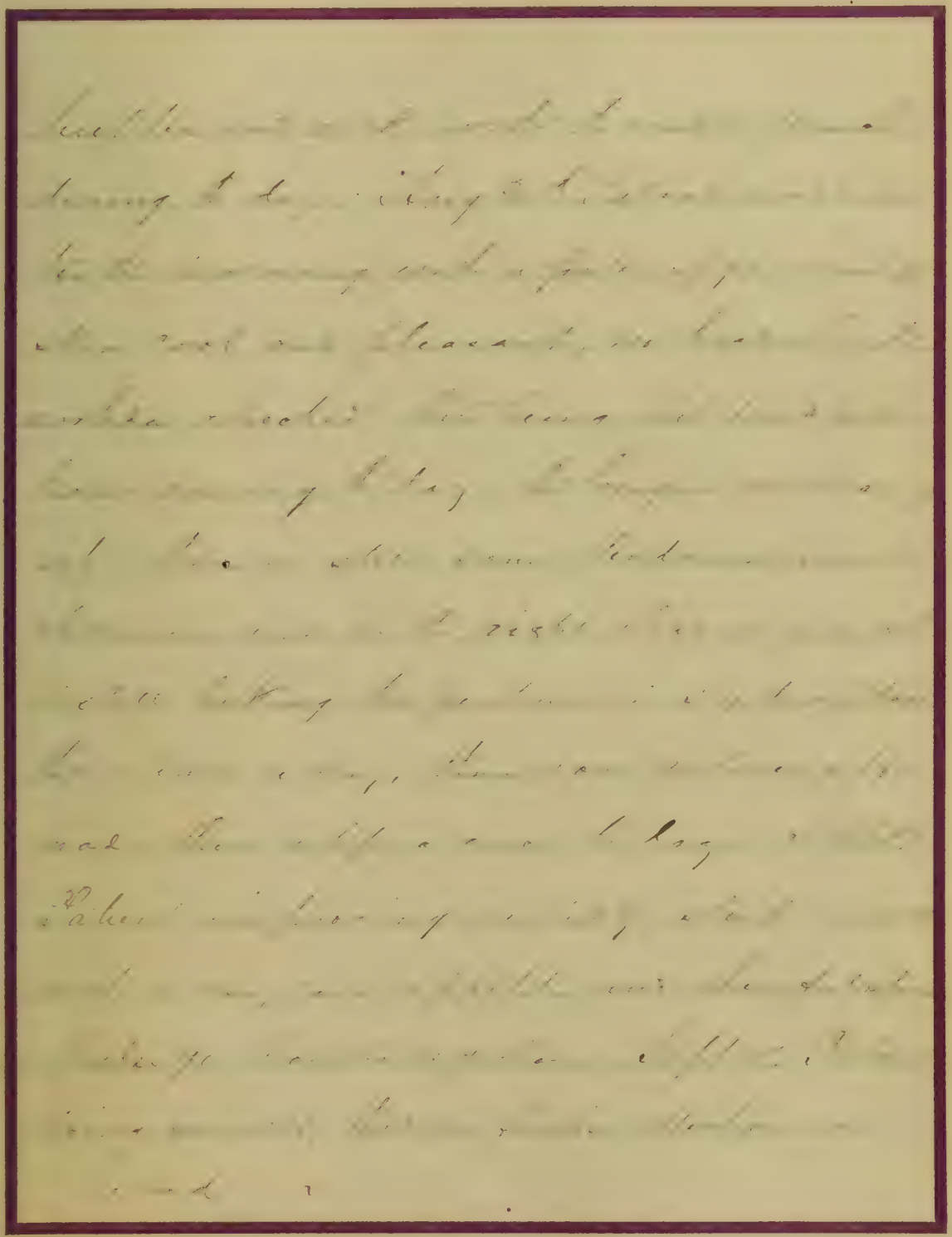


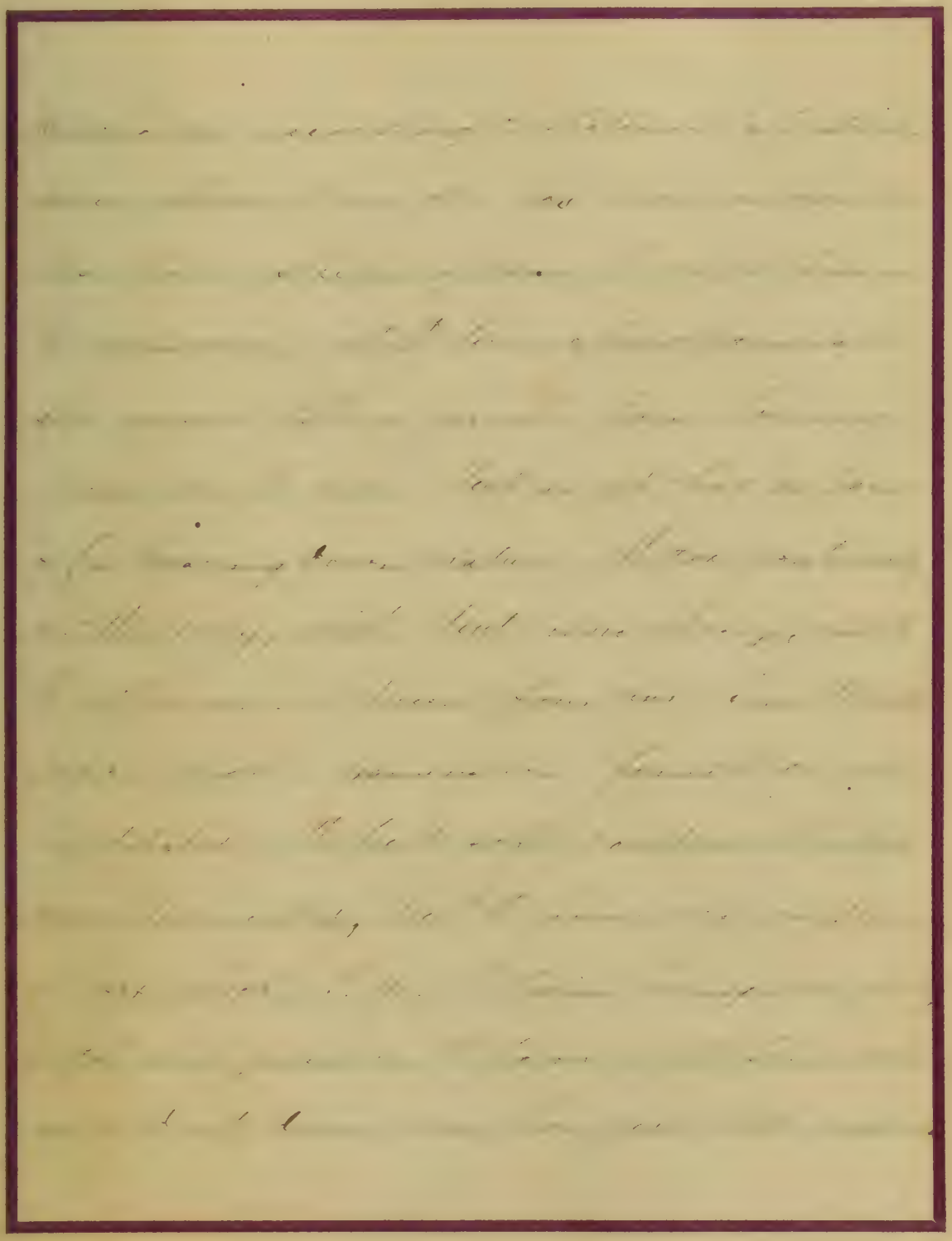


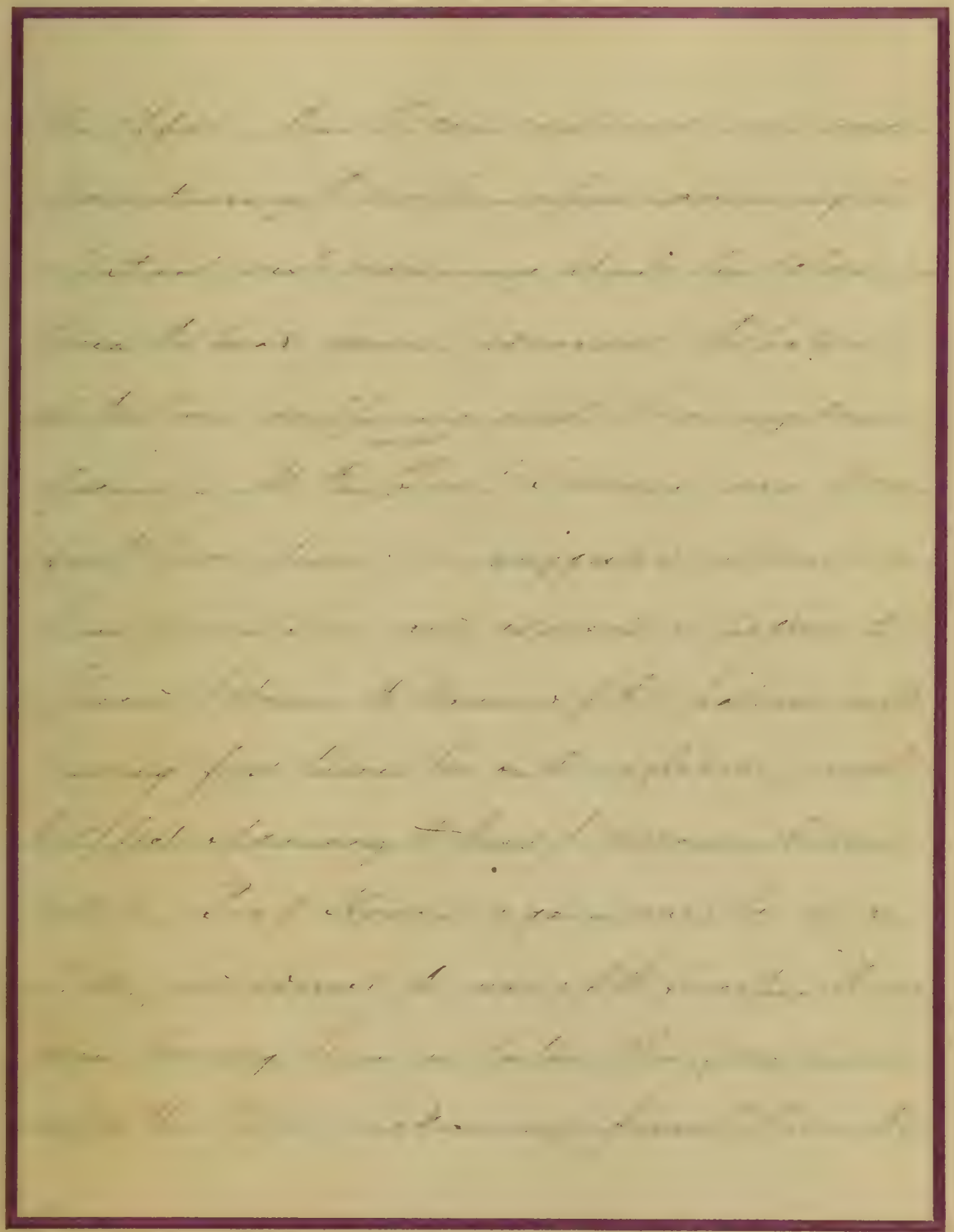
a clock and

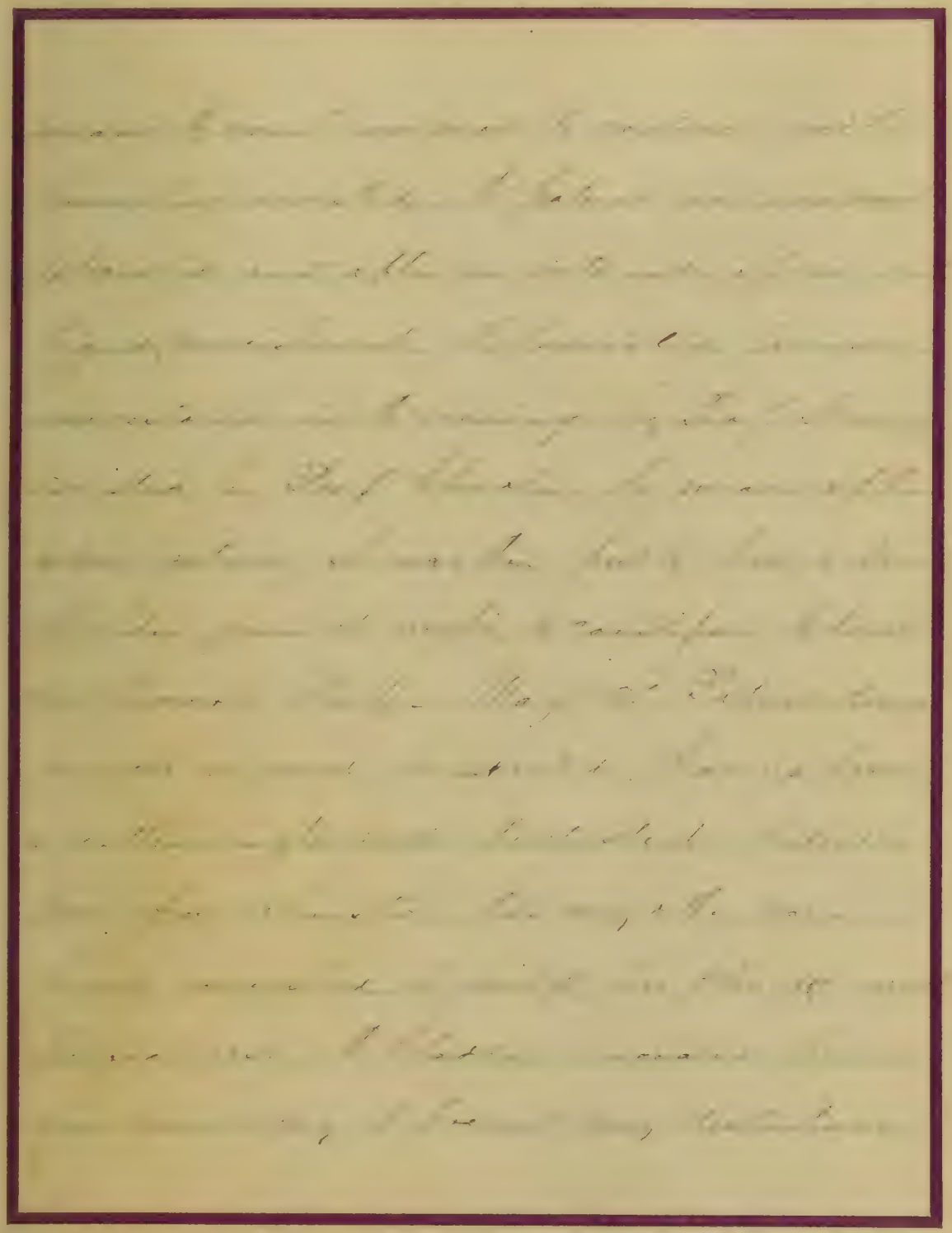


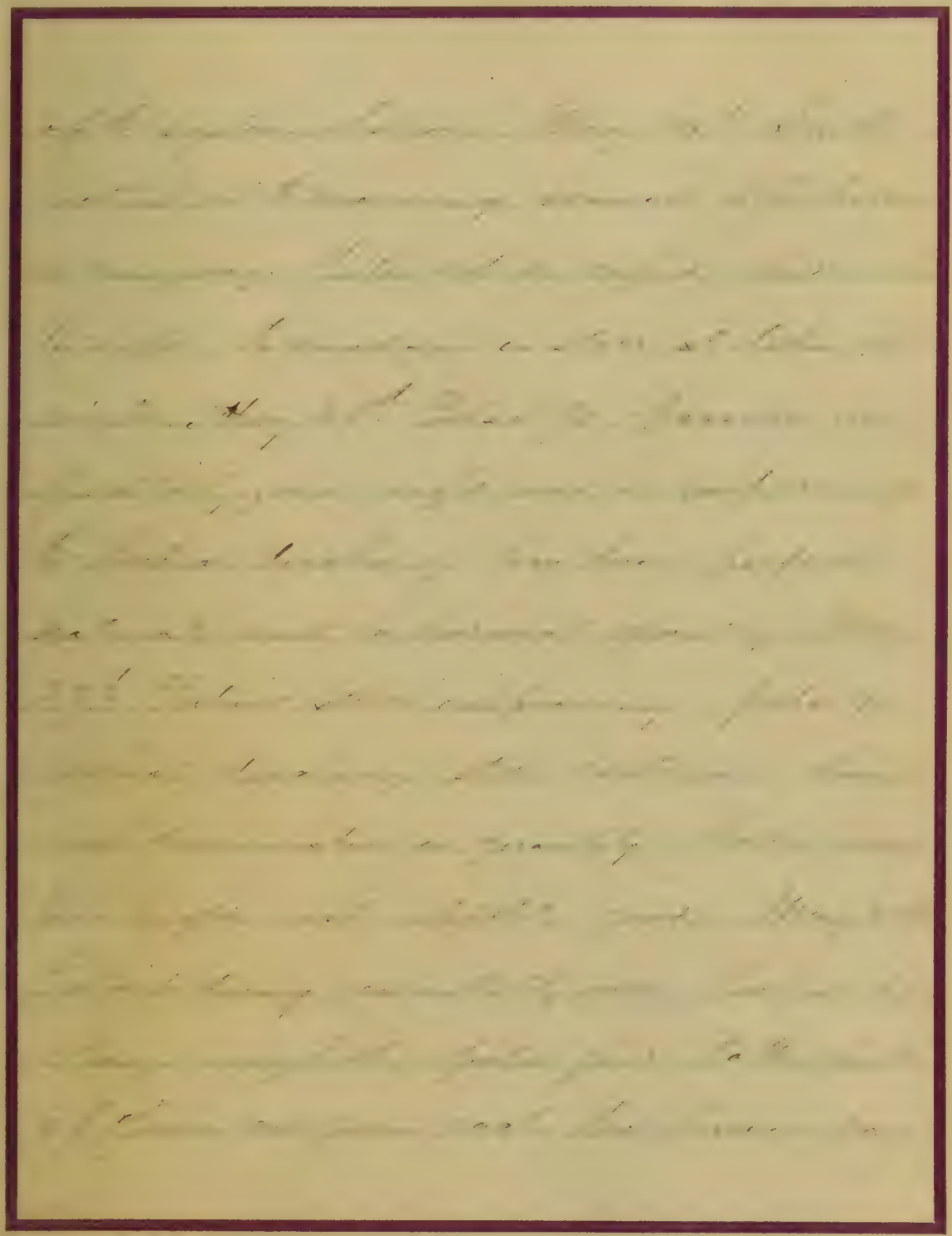












End.